New York Medical Times

Vol. XXIV. NEW YORK, MARCH, 1896. No. 3.

ORIGINAL ARTICLES.

THE CATHODE RAYS OF CLAIRVOYANCE.

By Egbert Guernsey, M. D.

IN the quiet of his laboratory, in Wurzburg University, a young man not over forty years of age has recently startled the world by the discovery of a process by means of which light generated in a vacuum tube by the rapid vibration of electricity passing through it, caused by the action of the electric fluid in disturbing the molecules of rarefied air, is propelled by the cathode or negative pole with great force through the glass walls of the tube and anything else, wood, flesh, steel or stone, between it and the sensitive plate which is to register its rays.

It has long been known that the highly electrical particles which are projected from the negative pole in a vacuum tube produce a strong luminosity (phosphorescence) when they strike against the glass walls of the tube. Prof. Röntgen claims as his discovery, that in addition to this phosphorescence another radiation is produced, which is capable of penetrating through all bodies, passing in straight lines easily through paper, cardboard, wood, flesh, stone, and even steel. One characteristic feature of this new radiation, which distinguishes it from all effects, so far known, of radiant light and heat, is that it cannot be refracted or reflected. The discovery of Prof. Röntgen, if it could be called a discovery, was in a great measure utilizing the investigations of others, and so putting them together and producing results which have startled the world, and which followed out with the enthusiasm and diligence of hosts of scientific investigators may disclose the very processes of life, of the evolution of thought, and the entity of the human soul.

It was a favorite point in the lectures of Prof. Tindal that the insensible waves of heat which are stopped by metals can penetrate through rock salt and that equally unseen actinic (or photographic) waves can penetrate through quartz, but are largly stopped by glass. Almey discovered means of photographing heat waves, and succeeded in photographing, by its own invisible radiation, in a dark room, a kettle full of boiling water. Later it was found that an opaque .screen of the hard, black India rubber known as ebonite, is transparent to heat waves. Some seven years ago, by the researches of Hertz and Lodge, it became known that electric waves, though arrested by metallic screens, can pass readily through walls of stone, brick or wood, or through the human body. Crookes discovered that in the extremely gaseous residues in the tubes which he employed, the discharge from the negative or cathode pole cast shadows on the walls of the opposing tube. These cathode rays have been investigated, and by many experimenters, including Goldstein, Wiedeman and Lenard. They were found to be enormously active in exciting phosphorescence, and to travel quite differently from ordinary rays of light.

Hertz showed four years ago that the so-called cathode rays, generated by electric discharges through a rarefied gas, would pass through metal films impervious to ordinary light, and produce optical effects beyond. Lenard showed that these rays could penetrate a considerable distance through the .aluminum window, which he placed in Crookes tubes, as the rays pass through that metal much more readily than any other metal or glass, and that they were capable of casting phosphorescence in much the same manner as when they fell on substances in the tube; that they could also penetrate metals and many opaque substances, and were capable of acting upon photographic plates which depend upon the regular capacity to the cathode rays, other .things being equal. Lenard also showed that the rays were not only capable of passing through the aluminum from the Crookes tubes, but that they were propogated through a vacuum which was made so high that no electric discharge could pass. In other words, when the rays were set up in the Crookes vacuum by an electric current, they might enter a much higher vacuum, incapable of carrying an electric discharge and traverse such higher vacuum. From this he reasoned that the phenomena was some effect of ether. It will be seen that Röntgen has gone much farther than any of his predecessors. In his hands rays pass through a considerable thickness of wood and metal, and disclose as through a transparent medium, when applied to man, the bony structure of the human frame. It is said that Röntgen claims that the cathode rays invesgated by Lenard are different from the rays with which he has performed his brilliant work. This remains to be seen by future experiments, but there is evidently a great similarity between the effects of the rays which both have investigated. In all probability the steps of Lenard's and Hertz's investigations led up to those of Röntgen. Following the line of Röntgen's experiments every day discloses new wonders, and brings out in bold relief facts which astonish the scientific world. Photographs which at first required an hour to produce the desired impression on the sensitive plate are now made in but little over a minute, and it is claimed that a scientist has invented an optical instrument through which the eye can see with the rays as they pass through the dense medium, without the aid of the photographic plate.

Experiments have shown also that a high vacuum is not necessary to produce the photograph. After a certain vacuum has been reached all further absence of air means simply the necessity of more electric power to produce the light, and when great power is used, unless great precaution is taken, the tubes are destroyed by fusing. In early experiments with the cathode rays, Crookes tubes were used, but these was not only very expensive, costing about twenty dollars each, but absorbed fully 95 per cent. of the rays. Edison has prepared tubes of much thinner glass, being but one-sixty-fourth of an inch in thickness, and therefore much more effective than the imported Crookes tubes. These tubes, which he calls fluorescent tubes, can be made at a cost of not more than fifty cents each. In his experiments with these he uses two aluminum disks, one representing the anode or positive pole, and the other the cathode or negative pole. The positive or anode disk or electrode is suspended by a small wire close to the mouth or top of the tube. The cathode or negative disk is fixed in the center of the bulb. It is half an inch in diameter, and is placed on an angle, as if intended to act as a reflector. When a tube is being tested, it is attached to an air pump and also connected with the electric current. When the air exhaustion becomes sufficient the fluorescence begins. As the process is continued various colors are observed in the tube. First the interior is a deep violet, that gradually becomes light blue. At the beginning it fills the entire tube, but it gradually forsakes the interior and seems to cling ro the glass. At that point the tube is hermetically sealed and ready for experimental use. The action and shading of the fluorescence is the only known way of measuring the power of the cathode rays. This will be more certain as the eye from continual practice is enabled to detect the precise shading which experience has shown necessary. In summing up the facts brought out in these experiments we find that the generation of the light takes place when the proper fluorescence is obtained within the tube, and it is caused by the electric fluid in disturbing the molecules of rarefied air. The cathode does not make the light, but propels it with great force against and through the glass of its prison and anything else which may intervene between it and the sensitive plate which is to register its rays.

2. That these rays act readily through wood and flesh less readily through metal, except the lightest aluminum, and hardly at all through glass.

3. That the rays are not perceptibly reflected or refracted or disturbed by the magnet.

4. That a medium—a solution of iodine, which absorbs the short violet rays, does not allow the Röntgen influence to pass, and a medium—a solution of alum, which absorbs long rays, does allow Röntgen influence to pass. It is impossible at this early stage of development to form more than the faintest conception of the wonders to which this discovery may lead. In studying the molecules of matter in the attenuated ether of the vacuum tube, which, propelled by the cathode pole, strike out with such fierce energy as to pass through flesh, wood and metals to the sensitive plate beyond, we seem to have within our grasp and subject to our control, those physical particles which are supposed to constitute the physical basis of the universe. These little particles of radiant matter which exist everywhere through the atmosphere, so minute that a quadrillion of them roam with freedom in a bulb some four inches in diameter, in some of their properties are as material as the floor upon which we stand, while in other properties they almost assume the character of radiant energy, moving with such rapidity as to permeate all bodies and all space, not simply permeating the unoccupied space between atoms and molecules, but filling the entire domain of the physical from atom center to atom center, and from space to space as one indissoluble soul. Without the omnipresent atmosphere or ether of Nature the phenomena would cease. Communication of energy from sun to planet, from constellation to constellation, could not be maintained unless it be conceded that motion, which is an inseperable factor of all energy, can travel through abysmal voids without any medium of transmission. Every step in discovery, along these physical lines, approaches nearer and nearer to the spiritual ideal and the demonstration of psychic energy, which bridges the chasm between mind and matter.

As we touch the border land between the known and the unknown we just begin to comprehend in the shadows which float around us how matter and spirit flow into each other, and we reach out with still more eager hands to fathom the great mystery of life and of evolution. The analysis of the Akasa or ether by the Vedas thousands of years before Christ, and transmitted to the eastern Hindoo sages, receiving from them clearer illustrations and greater force as they came down through the ages, no longer shut up in the mountain monasteries, are springing into new life and strength at the magic touch of science. The cathode rays before which the invisible become visible, and the opaque transparent, are the clairvoyance of science, standing, perhaps, in the same rank in some way not now understood, but reaching the same results as the mental or spiritual clairvoyance which has long been a mysterious but demonstrated fact. In the light of the present and the past it is certainly not too much to predict that at no distant day the birth of thought and its evolution may be seen as clearly as diatomes through the microscope, and the entity of the human soul clearly demonstrated as a scientific fact.

SOME EARLY EXPERIMENTS IN SERO-THERAPY.

BY JAMES ROBIE WOOD, M. D., NEW YORK.

EGO IPSE FECI! The kind allusion of the MEDICAL TIMES, desiring me to break my long silence in regard to certain experiments in sero-therapy, encourages me to publish, for the first time, a relation of my experience in that field.

At the outset, let me distinctly declare that I

make no claim of priority. Although my first attempts began before 1876, I was led to them by what I had learned from my masters in isopathy. I never for an instant considered that I was looking in a new direction, nor do I now, for those old despised martyrs of their convictions *told the whole story of the law.* Had they possessed our fine microscopes, hypodermic syringes, etc., there might have been no glories left for the brows of recent discoverers of antitoxins. From the belittled isopaths I tried to learn what they had taught, intending, with my poor ability, to carry their ideas one step forward with the improved means at command.

Those noble and misunderstood pioneers have long slept in unhonored graves, under the soil of their German fatherland. Ridicule and scornful revilings had embittered their lives almost beyond endurance *for daring to utter such strange and unorthodox principles of medical belief.* How often is this the story of those who first point the way to any new truth! Their earnest appeal to a scoffing and doubting age is seldom heard or heeded. They may suffer humiliation, sorrow and want, and sometimes banishment, for presuming to act upon the inspiration of truth within them. At last, after a dismal life of failure, they lie down and die, and are soon forgotten by a deaf and blind world. The seeds of truth that they have planted will surely germinate in some later generation, but those who then do wear the laurels which they should have worn, too seldom endeavor to remove the thorns of neglect by reviving and honoring the forgotten names of their masters, who received no recompense for sincere labors that were lost upon the past because the time was not ripe.

When Pasteur and Koch announced their endorsement of the isopathic theory I refused to publish what had already been done, because it would appear puerile, at such an hour and amid universal applause, for me to say *I also did it.* But when disaster followed in the wake of Koch's lymph I prepared a paper on the subject, feeling assured that no motives of vain glory could be ascribed to one who espoused an apparently *lost cause.*

Yet again I hesitated and withheld the article, because many, if not all, of my experiments had been crude and unsatisfactory, and, besides, I dreaded meeting the stony stare of doubt. For several other reasons my early researches were not published in 1876. One was fear of public censure *for presuming to use such a hazardous and unheard-of therapy.* Another reason was because I did not care to be held responsible for placing such a dangerous tool in the hands of careless practitioners. While the majority of physicians would exert great caution in its use, there might be a few who would inoculate patients suffering from curable diseases, *with serious maladies.*

Prior to 1876 I took pleasure in attending the clinics of Prof. Abraham Jacobi, from whose valuable talks I derived great profit. On one occasion he spoke at some length upon the inoculation of tubercle in the lower animals. His words left a strong impression upon my mind. Being already somewhat conversant with the theory and experiments of Lux and his co-laborers during the early part of this century, I began to ask myself, is it not possible, after all, that their maligned law possesses a veritable germ of truth? I became more and more convinced of the value of the proposition *that disease, especially if of a malignant character, may be cured by a mitigated poison obtained from the self-same malady. Or, rather, that many bodily ills bear their own antidotes:*

> "Like seeking like doth
> Like of like beguile."

Nature is ever on the alert to lead us back to health, but she often needs a guide and guardian. May it not be true, after all, that identity and similarity both are our surest means of cure?

In 1867 an old German physician I had attended during an attack of Asiatic cholera, who had been a student of Rokitansky, gave me a large case of ancient vials which he had picked up in Germany many years before. Among them I discovered a number of isopathic preparations from various diseases, labelled "Phthisin," "Hydrophobin," "Scarlatinin," etc. Here was sufficient evidence of isopathic practice in the first half of this century. The memory of these and various other events and circumstances occurring a few years later, especially the remarks of Prof. Jacobi, spurred me on with an enthusiastic desire to experiment in the same direction, and if possible to prove or disprove the law of cure by identity.

In the year 1875 I considered the means, and sought opportunities for putting my plans into execution. In private practice it is difficult to pursue experimental work, on account of the limited number of patients suffering from the same type of disease. At this juncture, without my knowledge or solicitation, the Commissioners of Charity and Correction appointed me as one of the visiting physicians of the Ward's Island Hospital, which has since been transferred to Blackwell's Island and known as the Metropolitan Hospital.

On Ward's Island there was plenty of material in the consumption and cancer wards, suitable for my intended experiments. What was of more importance, I received valuable assistance from one of the resident physicians, Dr. Charles L. Nichols, who has since and for many years been in active practice in Worcester, Mass. His honorable and scrupulous regard for the necessity of exactness and integrity of the too much abused medical and surgical statistics made him watchful of every possibility of error as to the causes of improvement.

As soon as possible, I purchased a number of rabbits for the first trials, as they were considered very susceptible of tubercular infection. Fearing the consequences of exposure of my experiments to the censure of the press, I personally carried my live stock in baskets to the island, and confined them to a close, warm room, such being the best condition for the rapid development of tubercular diseases. These animals were at once inoculated with the sputa from patients who

were in the last stage of pulmonary consumption. This was done by hypodermatic injection, and by placing some of the same upon abraded surfaces and sealing them with adhesive plaster. Impatience decided upon a trial of the serum from one of the rabbits, while the tubercular process was, as it were, in transit, and before it had time to locate upon any organ or tissue of the body.

The first animal was killed within one month after the time of its inoculation, and its lungs and other organs and tissues carefully examined. Points presenting the slightest possibility of an approach to disease were removed, and thoroughly rubbed to a paste, and then a part of this was carried on to a thin dilution.

Within fifteen or twenty minutes from the time of the death of the rabbit, in order to anticipate any possible corruption of the serum, a number of patients received the lymph by hypodermatic injection and others the paste, by scraping the cuticle as in the process for vaccination, and rubbing it well upon the abraded surfaces. These were then carefully covered with adhesive plaster.

The great difficulty that had confronted Dr. Nichols and myself had been in the selection of subjects for inoculation. Neither of us dared to risk applying the material to any but advanced and comparatively hopeless cases, in whose condition there could be no shadow of doubt as to diagnosis. In those days we had not the comfort of being able to recognize the tubercle bacilli. Of the cases thus treated one only was strong enough to be out of bed and about the ward. Patiently, as the weeks wore away, we awaited developments. From the hopeless invalids, confined to their beds, there came no comforting sign to give us joy. But the patient who was able to be up certainly did improve, and a few weeks later left the hospital in a fair condition. In each and all, other treatment was continued as before. The one who improved had been taking lycopodium as her only remedy, and this was continued throughout the treatment.

Considering that the solitary case of improvement was in the only subject wherein there was the slightest chance of life, I tried to take solid comfort and renewed courage. But Dr. Nichols, with his strict ideas of judging such cases, argued that we had no right to assume, without many more similar ones benefited, that the serum produced the result. In other words: "One swallow does not make a summer." I, too, felt that unless a large number responded favorably to the serum treatment, we had no excuse for imposing it upon the profession as a valuable addition to therapy. Another reason, which in later years has strengthened my doubt as to the cause of the benefit produced in that one case, is the peculiar behavior of this class of pulmonary patients—*their undying hopefulness*. Whoever has had many such to care for must have frequently observed their sudden brightening up for a few days or weeks, after a distinct change in treatment, either at the hands of another physician or after some entire change in the medicines, or in the manner of giving them by their regular medical attendant.

In our case, the patient having considerable vitality left, and being happily influenced by noticing our constant and intense interest in her, also observing the novel way of applying the treatment, she was inspired with the wonderfully reviving influence of renewed hope. A fair example of this, although a sad illustration of the contemptible and degrading resorts of charlatanism, I will give in the words of the so-called doctor, an advertising quack, who told it to an old acquaintance of mine.

"Harry," said he, "you know my conscience is a pretty tough one, but once it got the best of me. I was called out of town by some one who had seen my advertisement, and found a miserably emaciated young man in the last stages of consumption, and hardly able to sit up in bed. Determined not to have a death upon my hands, I said to him that I regretted very much being unable to apply a certain wonderful instrument, which I kept at my office, to his throat. I told him it was impossible for me, however, to see him again. Imagine my consternation, a few days after, when this same young man, who appeared to be dying, fell exhausted in my office, after painfully struggling up my stairs. I too well remembered the words of mine which had determined his making this frightful effort to reach promised succor. I looked around to find some plausible excuse in the way of an instrument to answer his pathetic demand. Mechanically picking up a glass rod, I applied it with much mystery and care to his throat. When at last I withdrew the sham apology of a remedy, he exclaimed, with a deep sigh, 'Oh, doctor, I feel better already!' And he was really for a time revived and invigorated. But I was not, for my conscience had now had *its first inning*."

Throughout the experiments no marked symptom of injury or benefit appeared in those confined to their beds, except possibly an occasional variation in temperature. There seemed so little prospect of demonstrating anything by continuing the same manner of preparing the lymph that I rested, for the time being, on my oars, watching, waiting and planning. Being exceedingly fearful that I might inoculate some non-tubercular case with tubercle, I dared not inject the serum in more favorable cases. This fear followed me when I turned my experiments to cancerous affections, as will be seen in my next paper. In no case have I presumed to apply the serum gathered for my trials in cancerous diseases unless there was present extensive ulcerative destruction of tissue.

I am inclined to the belief that isopathic serum therapy is limited in its benefits to a small class of acute and chronic contagious diseases. In such cases it may have a brilliant future, especially during great epidemics.

But sooner or later it will be dethroned by some mightier therapeutic power. The gathering forces of courageous minds in the rising medical generations, bearing the standard of liberty and truth, will down the narrow men of all schools, just as the younger surgeons have already done; and then a system of medicine shall be developed and

perfected from the apparently conflicting theories of our day. So complete will be the therapeutic laws of the future that, in a measure, death itself shall be overcome.

In my next paper the account of experiments in serum therapy of tubercle is to be concluded, and then cancer will be taken up. This to be followed later by an article on various peculiar medical fads, and what will be the therapeutics of the future?

P. S.—Several years ago, I received a letter from Dr. Charles L. Nichols, of Worcester, informing me that he still kept some of the vials of our preparations from tubercle which we made in 1875.

To-day, February 19, 1896, I have received a letter from Dr. Nichols, to whom I had submitted a summary of what I have written in relation to our experiments. In this letter he replies: "I think what you have written is fair and just."

CHRONIC GASTRIC DYSPEPSIA.

By F. P. Warner, M. D., Canandaigua, N. Y.

DYSPEPSIA is a term used to define a train of symptoms caused by a functional derangement of the digestive processes.

In regard to its morbid anatomy there is none, except when long continued the stomach walls may be thinned, the mucous membrane atrophied, and shrunken with fatty degeneration.

Its etilology must be understood to treat a case successfully.

It may be inherited, and accompany also advancing years.

There are a class of cases in which there is a deficiency of the quantity of gastric juice secreted. These cases are generally of the enfeebled constitutions who have been weakened by overwork, by poor quality of food, by narcotics, tobacco, excesses of any kind which undermine the bodily condition.

This chronic disorder arises from the persistent and almost imperceptible disturbances arising from the disintegration or death of cell structure, the downfall of force and the faulty elimination of waste products.

This you see in the system in which the ravages of phthisis is making its onslaught, in which the fibrous tissue is attacked and leads the victim on to a lack of nutrition and to consumption, or attacking the hepatic functions and culminating in inflammatory rheumatism or gout. In this class of cases, as with the muscular troubles of the stomach, we often have to look beyond this organ to find a cause of the diseased states, as to the thin and impure blood, to the weak and tired nerve centers, and to impaired cell activity throughout the body.

The fault may lie in the tissue-forming material of the body or blood, or this important fluid may be charged with poisonous material absorbed from the alimentary canal or from a faulty action of liver, or whatever would produce anæmia, chlorosis, malaria, lithæmia, kidney diseases, etc., but the chief factor always present, always active, affecting secretion and muscular movement, is impaired nerve supply.

As you look over your cases you will find that dyspepsia occurs in the neurotic individual, in those who are foremost in the reckless pursuits of modern life; in those who are on the highway along which honors are to be lost and won.

Among those in whom sudden reverses come, and hence subject to intense emotion, shocks, great sorrows, and the overworked, whose nerves cannot stand the strain and worry of business competition. How often are we called upon to prescribe for the dyspepsia of the indolent, the day laborer, the farmer, the man who never worries, or the person—man or woman—who is clothed in flesh, plump and round, as some of those well-fed gentlemen and ladies whom you can name? Ay, is it not rather the man or the woman who has the lean and hungry look, who always does things in a hurry, who always goes through a door before he gets to it, who has never time to say good morning, who goes to his business and frets and worries all the day long, and goes home at night to scold the wife and children and to spend the night tossing upon the sea of wakefulness, and rising in the morning to take his tea and toast, and then to spend an hour waiting to see if it is going to distress him instead of perusing his morning paper or frolicking with the children? I would emphasize this point of the neurotic element in dyspepsia, because I would have you remember that your greatest failures will lie along this line, and when you sit down and wonder at your failures, why your pepsin and pancreatin, your dyspepsin and papoid, and whole list of such digestive remedies have failed to help your case, that you will come to your senses and see that you have been prescribing for an effect instead of a cause; that you have been treating a stomach which was all right in itself, and neglected the great central nervous system, which has been goading and tormenting and besieging an organ secondarily.

Secondly, there are another class of cases characterized by an excess of the gastric secretion. This is most apt to occur in those of a fleshy constitution, or those who suffer from a hepatic disease, or in gouty subjects.

Other causes may be found in a change of the gastric secretion, impaired motion of the stomach, prolonged mental and physical labor, or a deficiency of labor, and also in irregularity of and improper eating. We must not also forget the sympathetic dyspepsia occurring in those with disease in the remote organs, as of the uterus. When we consider how the stomach is disturbed, as in the morning sickness of pregnancy, we see that this and similar uterine diseases are a great underlying cause in many forms of gastric irritation.

The symptoms of chronic dyspepsia are so manifold and of such a varying nature, and must of necessity be so familiar to all, that we deem it not necessary to enter into a discussion of its many peculiar characteristics.

The only disease with which chronic dyspepsia can be confounded is chronic gastric catarrh, which is an advanced stage of dyspepsia. Atonic dyspepsia is generally associated with anæmia, dependent on habits of life or unhealthy occupation, while gastric catarrh is a result of alcoholic stimulants, or associated with some other disease in the body, as of the thorax, kidneys or liver.

Atonic dyspepsia has little or no pain nor tenderness in the stomach, while gastric catarrh has much of it.

Atonic dyspepsia has a loss of appetite, often with a broad, flabby and pale tongue, while in chronic gastric catarrh there is a more profound physical disturbance, with a coated tongue. Spices and stimulants relieve the atonic dyspeptic and increase the symptoms of chronic catarrh.

The urine is not disturbed in the dyspeptic, while in gastritis, it may be alkaline and deposit urates, oxalates, phosphates, etc.

Now, how are we to decide upon these different forms of dyspepsia, as much of our success in the treatment depends upon our proper differentiation of the case?

There are many scientific methods of examining these cases, and diagnosing the different forms of it, but many of these methods are expensive and difficult, and would require a laboratory, and a thorough knowledge of chemistry and bacteriology.

But there are simpler methods which the busy practitioner can use, and which will assist him in the arrangement of his cases for the successful treatment of them.

If a patient comes to you and utters a complaint against a rebellious stomach and he is not clear in his idea of his distresses, when and how he is most affected by his meals, suppose you tell him to eat a plain breakfast of hot milk and water, or tea or coffee and some bread without butter, keeping the amount of fluid below a pint and note all his distresses.

If at the end of a half hour or so he complains of pain and a bad, uneasy feeling in the stomach which ends with hard pains, cramps and vomiting, there is some muscular and nervous disturbance of the stomach, or inflammation or irritation of the duodenum.

If at the end of two hours there is only heat, burning water brash, acid rising into the throat, and burning in the fauces, here we have a hyperacidity, or an increase of the hydrochloric and other acids of the stomach.

If at the end of two or three hours there are no such symptoms, but a feeling of weight, pressure load on the stomach, tightness about the waist, fulness, eructations of flatulence, etc., we have then a case of deficiency of the gastric juices of the stomach, and if severe, atrophy of the gastric glands and thinning of its walls, with dilatation, etc.

In nervous dyspepsia, pain is one of the most prominent symptoms, and is not always associated with the kind of food taken, even a little cold water often exciting the pain. Fatty and acid fruits are quite sure to excite the pain. In this form the appetite may be ravenous, or lost altogether. Should the above test meal not prove satisfactory nor the disease yield to treatment, it becomes necessary to ascertain the exact condition of the stomach and gastric juice, which is done in the following manner: To test for hyper-secretion, wash out the stomach at night just before retiring, or three hours after the evening meal. Then in the morning, before the patient has eaten anything, let him swallow the Einhorn bucket, or, which is better, introduce the stomach tube and syphon out some of the gastric juice. If this juice contains more than 50 cubic centimeters, hyper-secretion exists, and the acid nature of it may be found by the Günzberg test.

If atony exists, not having worked the stomach the night before, the morning's washing will contain particles of undigested food.

Bacteria and all forms of germs must be discovered by the use of the microscope when there is a great deal of flatulence and fermentation.

And so in different ways, the description of which would be too long for this paper, we must test for the origin of the peristaltic action of the walls of the stomach, and also the rate of absorption from the mucous membrane.

In regard to the treatment of these different forms of dyspepsia diet plays a most important part, as well as the manner in which food is eaten. Many of our American business men never have seemed to learn the important part that good teeth, properly used, have in the economy of digestion. The "quick lunch" is something every physician ought to enjoin upon his patients to avoid, instructing them not to make the stomach do what the teeth ought to do. Slow eaters have much less of stomach difficulties than those who "eat and run."

What kinds of foods do these different forms of dyspepsia require?

For those suffering from hyper-acidity the diet should consist largely of rare, finely-minced beef, stale and toasted bread. Then, when improvement sets in, there may be allowed fresh vegetables and sub-acid fruits, the former of these well cooked and pulverized, the latter stewed and baked. This should be persisted in for several weeks.

For deficiency of the gastric juice or for atonic dyspepsia, beef, mutton, poultry, well cooked, for the breakfast and noonday meal, with soup, broths, stale bread, crackers, etc. A reasonable variety and moderate use of condiments are allowable in this form of dyspepsia.

In the nervous form of this trouble, here above all others should we impress our patients with the necessity of slow eating, and thoroughly masticating the food. These are the ones who are the most liable to eat rapidly. They should avoid tea, coffee, alcohol, pickles, condiments, pastries, and above all, over-eating. Food had best be taken often and in smaller quantities, even a light lunch at bedtime, and never to eat when fatigued or worried.

In the flatulent form, which is often seen in the nervous woman, there should be avoided all sweet and starchy foods. All fluid should be drank an hour before or two hours after eating.

Some have recommended to abstain from meat and vegetables at the same meal, using only one or the other. Cream is better for the coffee. Tea should be avoided, as well as malt liquors. Saccharin is best for sweetening the coffee. In some cases where the above does not agree, the reverse must be tried, and instead of meats use vegetables only.

Approaching the medical treatment of this disease every physician must be a law unto himself, and every case a law unto itself, as in no disease is there a greater variety of remedies required.

In all these different forms lavage plays a most important part, washing the stomach first with warm borax water, and immediately follow with warm water, colored well with hydrastis or listerine. This, of course, before the meals, or three or four hours afterwards.

In the form of hyper-secretion with hyper-acidity, lemon juice, sour cider and the mineral acids afford much assistance, and in some cases grape fruit, oranges, etc. The sulphite of soda and salicylic acid act well, together with such attenuated remedies as nux. vom., puls. *Robinia*, carbo veg., kali. carb., podophyl., merc. dulc., sulphur, etc.

When there is a deficiency of the gastric juice we should endeavor to increase it by alkaline mineral waters, taken warm, as vichy, seltzer, Apollinaris, Clysmic, etc., before eating, and also bicarbonate of soda, phosphate of soda, or soda salicylate, in hot water, half an hour before meals. In this condition we often get atony and atrophy of the gastric glands with hypetrophy and dilatation.

We must select our remedies from those which act through the gastric plexus of nerves as well as the central nervous system.

Here electricity often aids us.

Strychnine, ignatia, gentian, colombo, or the bitter tonics, and hydrastis, helonias, etc. Pepsin and pancreatin, with ginger and bismuth, act well in most cases. If there is much flatulence we should use sub-gallate of bismuth, creosote, carbolic acid, etc. A good combination is also crude charcoal and milk sugar, equal parts, with one-third as much pepsin and one-eighth as much salicylic acid, with a sprinkling of ginger or cubebs powder. Dose, 5 or 10 grains, after meals.

In the painful form of this disorder, where the physician is required to make his most careful prescribing, remedies such as abies, argent nit., aurum, zinc, arsenicum, bismuth, resorcin, ignatia, coffea, cham., codiea, chloroform and cocaine. If the liver is torpid, as is the fact in many of these cases if constipation co-exists, the euonymin 1x, with the pepsin and pancreatin, acts well. If diarrhœa is present the dermatol takes the place of the euonymin.

If I do what I may in earnest, I need not mourn if I work no great work on the earth. To keep the growth of a thought that struggles towards the light; to brush with gentle hand the earth stain from the white of one snow drop, shall be my ambition.

APPENDICITIS: REPORT OF SIX CASES.

By W. W. Grant, M. D., Denver, Colorado.

BETTER and more accurate methods of diagnosis will not alone explain the frequency of appendicitis. It bears a close relation to the dietetic habits of the people. It will continue a common disease as long as people depart widely and habitually from a wholesome regimen and the plain demands of hygiene in habits of living. I do not overlook constitutional vices and tendencies in certain cases. It is my opinion that, in most cases, the individuals have been much troubled with indigestion for some time previous to the acute attack, a catarrhal condition of the cæcum preceding and accompanying the disease.

The theory of Talamon and Rochaz, that the disease is generally due to a concretion or calculus, is not sustained. Ekehorn believes that the bacillus *coli communis* is a common etiological factor, and this is more generally accepted; still it is *sub judice*. It is the belief of many surgeons that this bacterium is the cause of the extreme fatality in general septic peritonitis, being always found in these cases, and absent in those that recover.

Dr. Maurice Richardson, of Boston, a surgeon of wide experience, writes me that he has never known of a recovery under these circumstances. Whatever theories may obtain as to its cause, pathology and symptoms, it is evident that the disease is not infrequently overlooked, and even with a correct diagnosis the mortality is yet large.

With the view of presenting certain features and forms of the disease, I give the brief history of a few cases:

Case I.—Mrs. C., aged twenty-eight, married. I saw this patient in consultation on March 20, 1893, the tenth day of sickness. Had much pain in right hypogastrium, fever from the beginning, and chills for the last few days. Temperature now 104½°. The swelling or tumor extended from the anterior spinous process of the ilium to the border of the right rectus muscle.

The attending physician had been in some doubt as to the nature of the trouble, thinking it might be abscess of the broad ligament. There was no longer any doubt that it was an appendical abscess, and I was requested to operate.

I made a free incision, and evacuated a large quantity of pus and fæcal matter. Irrigated with salt solution and drained with iodoform gauze.

Recovery uninterrupted, and patient sittting up in two weeks, and wound closed in six weeks. Recovery perfect and permanent, with greatly improved digestion.

Case II.—Louis McC., aged twenty-four. This patient was brought to me from Goodland, Kan., by Dr. Worrell, with diagnosis of appendicitis, on June 25, 1894, the seventh day of sickness. Tumor and history similar to former—undoubted abscess, though much smaller.

I operated immediately on arrival at St. Jos-

eph's Hospital. Incision external and parallel to the cæcum. A pint of pus and scybalum evacuated. Irrigated with sublimate lotion, 1 to 4,000, and drained with iodoform gauze. On seventh day after operation, fæces washed from wound, but none after this date. Patient discharged well, on fourteenth day after operation. He is perfectly well to date. These two cases well illustrate the common form of circumscribed abscess from perforation of appendix. The latter is excluded by adhesions from the peritoneal cavity. The abscess is extra-peritoneal, and the operation should be. With this object in view, the incision here made is preferable to the Willard Parker incision, parallel to Poupart's ligament. Besides, the danger of ventral hernia is less. The danger of rupture into the peritoneal cavity, and death from septic peritonitis, is too great to admit of one hour's unnecessary delay, when it is known that pus exists—chills followed by increased temperature and pulse specially indicating it. No special effort should be made to find the appendix in these cases. It would be bad surgery to break up adhesions for this purpose. There is no compensation for the increased risk, and if a rent is made into the peritoneal cavity the patient will probably die in consequence.

The treatment by free incision and drainage is entirely successful. The patients do not suffer from subsequent attacks; and even if one should occasionally occur, a subsequent date is infinitely preferable for further operative interference. The suppurative process doubtless destroys the appendix, and it is as incapable of further harm as if cut off by the knife.

Case III.—Dr. R. W. Corwin, of Pueblo, was taken sick on March 7, 1894, with great pain over appendix and abdomen, with vomiting and purging, latter lasting four days; vomiting ceased in twenty-four hours. Temperature 102°, pulse 116. Both reduced and patient better after twenty-four hours. Continued to improve in every way until the 14th, when he got up and visited a patient, temperature being about normal. He was immediately worse, and retired to bed again, but did not keep it faithfully.

I saw him on the evening of March 17th. Temperature 100¼°, pulse 96. A small but well-defined appendical tumor. Was satisfied that neither pus nor perforation existed.

The question of operation was immediately presented and had to be determined at once. His history and local and general condition indicated that, with absolute quiet, proper diet and good care, he would get over this attack without operation.

This case was a forcible illustration (tenth day of sickness) of the lesson that it is sometimes too late for an early operation and too early for a late one, so I advised delay and the removal of the appendix when over the acute attack. During convalescence he visited his home in New York City, and on April 20th the appendix was removed by Dr. McBurney. He was in hospital four weeks. The organ was sacculated; the lumen obliterated not far from cæcum, and at the distal extremity a small cavity with no pus or concretion, surrounded by thickened, hardened walls of the appendix. An operation in the first few days of sickness in this case might have been indicated. But inflammation, breaking adhesions, and traumatism at a later date would have rendered the result more doubtful.

Case IV.—On April 14, 1895, was called to see Dr. W., at his residence in this city. Had a short attack a year ago of supposed appendicitis. Sick now several days. Temperature, 101° evenings and 99° mornings, pulse 84 to 96. Had much digestive trouble for a long time; considerable bloating of abdomen and some pain. No well-defined tumor, but steady, deep pressure revealed a hard swelling beneath the cæcum. My expressed opinion was that he had appendicitis; that its situation was the ileocæcal fossa; that if pus formed. it would be in the most favorable situation—retro-peritoneal—and suggested that an operation might be necessary soon. To this he did not take kindly. I saw him two or three days, and he improved so much that my visits ceased.

On the 21st he walked into my office, looking pale and bad, with a temperature of 100½° He believed that he was suffering from a mild typhoid fever. On the 23d he sent for me. Temperature, 101°; tympanites more extensive. I reiterated former opinion, and the next day he was convinced by rupture of the abscess, fortunately into the bowel. He passed during the day a large quantity of most offensive pus.

His complete recovery was now uninterrupted. Had he died, it would doubtless have been considered to be due to perforation of the ileum from ulceration of Peyer's glands. There are excellent reasons for the opinion that many patients die, though fewer than formerly, from perforative appendicitis, when it is called perforation from typhoid ulceration or perforation from inflammatory pelvic diseases.

Case V.—Mrs. F. L. W., aged twenty-two, married; Denver.

I was called on the evening of Jan. 23, 1894. Pain sharp and acute all over abdomen. Pain and tenderness greater over appendix. Patient had taken a dose of Hunyadi water and had purged freely, attended with some nausea; pulse 120 and weak, temperature 100°.

Gave hypodermic injections of morphia and atrophia, which induced a fairly quiet and good night. Morning of the 24th patient felt much better; pulse 108, temperature 100½°; tumor small and circumscribed; tympanites moderate.

Condition remained about the same until morning visit January 25th, when temperature was 103°, and I advised immediate operation, and, at the same time, requested consultation. After several conferences the operation was delayed until noon, January 28th. The temperature was now 104½°, and patient very weak.

Dr. J. W. O'Connor was called in council and I proceeded to operate, making a straight incision over cæcum. On opening the peritoneal cavity, gas with marked fæcal odor was at once manifest. Introducing the fingers, the appendix, containing a concretion, could really be felt, and

was drawn into the wound and ligated. It was soft and thoroughly gangrenous and the distal end contained a large fæcal concretion. It was surrounded by small abscesses which had ruptured, and by means of which gas and a small quantity of fæcal matter had escaped into the peritoneal cavity. The walls of the caecum were so thick and hard from inflammation that the opposing surfaces could not be approximated, and the entire peritoneal surface was covered with a gray and greenish lymph.

The general infection and the bad local condition rendered pouching of the stump impossible, and a fæcal fistula probable. A piece of omentum as large as the hand was removed because gangrenous. The intestinal and abdominal peritonium was much infected, and there was incipient general peritonitis. Irrigation was not employed for fear of spreading the infection, but the cavity was cleansed by sponges. The caput coli was enveloped in iodoform gauze and the ends brought out of the wound. The coils of the ileum were isolated from the diseased tissues as much as possible with the same material and brought to the surface in the same manner; antiseptic dressings and bandages were applied to the abdomen. I regard no drainage material as equal to gauze for infected localities. Digitaline and strychnine injections were given hypodermically before the operation (a good rule to observe in all severe operations), and during this operation repeated injections of nitro-glycerine and additional strychnine, the patient not requiring much ether.

She reacted very well, and with reasonable promptness. After the operation much difficulty was experienced in moving the bowels. Enemata were given with no success, and, on the third day, a dose of Hunyadi, as distention was becoming troublesome.

January 31st, fourth day after operation, intestinal paralysis was evident and distention increasing, causing much distress.

February 1st, condition of patient very bad; was vomiting, without nausea, and with practically little effort, large quantities of dark, liquid matter of strong fæcal odor. I determined in this emergency to aspirate the colon. No anæsthetic was given, and, with Dr. O'Connor's assistance, I introduced No. 2 needle (Codman & Shurtleff) into the middle of the transverse colon, and evacuated two quarts of dark, offensive liquid, and a large quantity of gas. With assistants pressing the abdominal walls, the contents were all forced in the direction of the needle, so the evacuation was quite complete. Patient expressed immediate relief; vomiting ceased at once, and in twelve hours the bowels commenced to act without artificial means.

Improvement continued from this time on. A fæcal fistula resulted, but closed without operation in two months, a tortuous fistula, not fæcal, remaining two months longer.

Following severe operations on abdominal viscera, and especially the bowels, intestinal paralysis occurs with sufficient frequency to merit our profound interest, because always dangerous and difficult to manage. I am not aware that aspiration for both gas and liquid has been previously done for this condition. Palpation and percussion showed that both existed in this case before the application of the remedy.

Dr. Richardson, who reports over 200 cases of appendicitis, in a letter to me states two objections to the needle in this condition (though he has not used it for this purpose); has known the knife to be used by Dr. Warren in one case, with good results: First—"If needle is small, will become obstructed; and if large, lead to extravasation." We cannot entirely escape danger. I believe neither objection well taken; for the distention being always due largely to gas, is relieved before the needle is withdrawn (and in the act, suction should be maintained).

The collapse and elasticity of the muscular fibers close the opening the moment of its withdrawal. Besides, no needle smaller than No. 2 should be used, and No. 3 may be with safety. This method is safer and better than the additional shock of ether and a second cutting operation. In the knowledge and experience of Dr. Richardson fæcal fistula are not uncommon, and usually heal without operation. In such a history as this—sudden attack, sharp, intense pain radiating from the appendix and extending over the abdomen, with nausea, diarrhœa and fast, small and weak pulse, with evident shock, indicating, as I believe, perforation, partial or complete, of appendix—I believe it would be best to operate as soon as reaction is established, if the temperature is 100° and a tumor can be felt.

Case VI.—E. A. Watrous, New York City, aged thirty. Taken sick in Leadville, Friday evening, May 10, 1895. Came to Denver accompanied by his physician, Dr. B. S. Galloway, Monday evening, May 13th, and placed in my charge. Was taken to St. Joseph's Hospital. I saw him at midnight with well-defined tumor over appendix; temperature 101°, pulse 80. Had a chill *en route* to Denver. No diarrhœa or vomiting; tympanites moderate. When I returned in the morning to operate, his temperature was 104°, pulse 96. I was satisfied the latter was naturally slow, and this was confirmed by convalescence, pulse being 60. I made a longitudinal incision a little external to cæcum and entered at once the peritoneal cavity. Appendix readily found. It contained pus throughout its entire length; had no concretion. On lifting into the field of vision for ligation, a little pus escaped through a pin-hole perforation. It was tied near the cæcum and cut off. A part of the adjoining mesentery, much inflamed and covered with grayish lymph, was also ligated and cut off. A piece of omentum half as large as the hand, badly inflamed, was treated in the same manner. I present the appendix as an excellent specimen of the gangrenous form—similar to former case, though not in such a bad state of decay and disintegration.

This form of the disease, with the appendix hanging in the pelvic cavity, is most dangerous of all, and gives no time for deliberation—perforation, as a rule, inducing a rapidly fatal general peri-

tonitis, the colon bacterium of Escherisch giving it its intensely unfavorable character.

The patient is walking about, and will leave for his home perfectly well.

With a certain diagnosis, when to operate, if at all, is a most interesting problem. I believe the teaching of Reclus—that the operation should be performed in every case as soon as the diagnosis is established—has more advocates in this country than any other.

On a former occasion before this Society, in reporting an operative case, I presented the statistics of Bigelow against this practice, as well as the opinions of others in its favor. Am frank to say that I have little confidence in the teaching of such figures. For obvious reasons they are misleading.

I am more than ever convinced that every case of decided severity should be operated on, not necessarily immediately, but it will be required sooner or later; in most of these cases, though, within a few days. No iron-clad rule can be laid down as applicable to all cases. I reiterate my formerly expressed opinion that each case should be judged on its merits as to operation and time of operation. Some will die if operated on at an unfavorable time, that might have recovered without; but more will die if not operated on at all. All recurring cases should be operated on, preferably in the interval, because the most favorable time.

In the four cases of this report operated on by me, it would have been better and safer if the operation had been done sooner in each case. Cases V. and VI., both intra-peritoneal, bad and unpromising, would have died in a short time but for the open method of treatment by gauze. No form of tube and no other form of drainage material answer the purpose so well. In Case IV. the operation was not clearly indicated in the very early stage, but it was before the abscess ruptured.

HEART FAILURE.

BY J. A. CARMICHAEL, M. D., NEW YORK.

A BILL is now pending before the State Legislature in which there is much good, because, among other useful suggestions, it especially proposes the abolition of the office of coroner in this city, as at present constituted. From the reports that are constantly being given to the public through the medium of the press, and through individual experience, of the methods, legal and illegal, mostly the latter, that are pursued in the administration of the functions belonging to the office of coroner, it may truly be said that there is not only the exhibition of pitiable ignorance, and of its necessary concomitant, brazen impudence, but the merest travesty of justice, and of the obligations imposed by the duties of ascertaining the cause or causes of death, and of deciding as to the criminality or non-criminality by which death has been produced. Take the average coroner of the City of New York, and you have the veriest Dogberry in office, even more veritable than the one that Shakespeare drew. How can it be otherwise, when the same processes make a coroner of him that elevate to a judicial seat so many so-called "justices" that disgrace the civil courts, and make the administration of the law "a delusion and a snare?" If it be the legitimate function of a coroner to ascertain the cause or causes of death, what, we ask, does the general report make of the fitness of the average coroner to determine whether it shall have been effected by violence, or by any other of the innumerable incidents or accidents by which life may be suddenly terminated, whether the cause be from without, extrinsic, or from within the body, the result of disease in this, that, or the other vital organ or organs. Are coroners appointed as such, from any consideration of their education, knowledge or acquirement of any kind whatsoever? Does the average coroner know "B from bull's foot" of any known science under the sun? or is he instructed or required to be instructed in anything else than the duties and obligations—honorable, we believe they are called in the political world, God save the mark—that may appertain to him because of his being supposed to have a "political pull," or to be a "heeler," pliant and crook-backed, so that his political pals can climb over him, and put a lot of other Dogberrys in office? Does the average coroner know a heart from a kidney, a brain from a bladder, a lung from a liver, a testicle from a tibia, an ovary from an omentum, or an uterus from an umbilicus; and, in the matter of disease, can he tell a carbuncle from a cancer, a boil from a blister, or a bruise from a bunion? Among the many excellent and praiseworthy services rendered to the public by the New York *Herald*, in its pursuit of and insistence upon matters of sanitation and various other subjects tending to the benefit of the public weal, and the promotion and preservation of the public security and protection, there is not one more important than that under our present consideration. Can there be a more pregnant question than that involved in the few words, How we die, and why we die?

In its discussions, daily repeated, of the innumerable host of subjects of vast and widespread interest to humanity, the great paper recalls, with still increasing zeal and earnestness, this question of the coronership, and the pressing need of its obliteration in perpetuo, and the immediate substitution of other and incalculably more valuable and efficient methods by which the question, how we die and why we die, may be solved and definitely settled, and the responsibility for the accurate discovery and knowledge of the cause or causes of death may be assigned to well-known professional competency, medical and legal. This brings up a second question for investigation as to another integral element, and a most necessary one in the construction of the coroner's department of the city's municipal organization, viz., its medical element. For a proper estimate of the value and efficiency of this element, as it now exists, the public is equally indebted to the incisive scrutiny and

discriminating judgment of the *Herald*, and what do we find? Again the everlasting political "pull" is the potent creative factor of place and emolument—you wriggle me in, and I'll wriggle you in, that's the shibboleth, the sesame, that opens doors, and inducts the sanctified and regenerate soul in among the other elect. It doesn't matter whether he knows anything about anatomy, physiology, pathology, surgery or any other of the requirements of a complete medical education. He has been whitewashed all over, and now his fleece is snow white and immaculate. The imprimatur of the order of the elect is upon him. That's enough, he's one of them, and worthy the confidence of all men! The great City of New York abounds in men with medical ability of the highest order, who by their education, association, professional attainments, and the authority that such attainments justify and compel, could and would give a dignity and a force and power to the decisions that were promulgated by them, that would command universal respect and confidence, and so cleanse and purify the department now known as that of the coroner, that there would be one "Augean stable" the less in this poor politics-ridden community, that has so often lifted up its supplicating hands and cried, "How long, O Lord, how long."

It would be difficult to improve upon the wisdom and foresight of the philosophers of old, and many a lesson that served as a guide to the intellectual, moral and physical lives of men, in the remote past, can, and does equally serve at the present hour. When the words "Coeslum non animum mutant, qui trans mare currunt"—They who cross the sea change their climate but not their natures—were written they were destined to come down through the ages, and to be repeated in all the manifold varieties and phases of human life, wherever human life existed. Moreover, may it be said in all truth, that in no conditions in which the lives of men are passed do the tendencies and proclivities to evil ways, which unhappily form so large a part of human nature—"human um est errare"—find such congenial soil for rank growth and noisome luxuriance as in the field of political strife and contention. It is a field sown with the seeds of evil passions, of a depravation of the moral instinct, and its husbandry garners hate and selfish greed. Let us go to the focus of convergence to which legislative wisdom—so called—hastens at each returning anniversary. Laws are to be designed, constructed and enacted for the security and well-being of the dear people, *and we, their lawmakers, owe allegiance to the popular will!* The tailors of Tooley, it will be remembered, proclaimed the same in the historic "We, the people of England," and we all know how fared that loyal proclamation. Is it any better in the more modern legislation? The average coroner has his legislative congener and co-worker, and the "pull" equally flourishes, "like the green bay tree," whenever and wherever politicians and lawmakers most do congregate. Possibly there might be some utility in following up and reviewing the tendencies and purposes of the life of the generic lawmaker, as we see and know him. But the daily newspaper, that should be a digestive help, chronicles the doings in the halls of legislative pulldom, and, as we read, gall substitutes appetite, many a wholesome breakfast is unstomached, and we go hungry. Let us look onward a little, and speculate upon the probable fate of the bill that has, with perhaps meek supplication, gone up to Albany to be adjudged by legislative wisdom. There, the average coroner, and the average legislator, with their "heelers," are in force. Into many an ear is whispered the shibboleth, Wriggle me in, and I'll wriggle you in, and nodding heads and sweet smiles prevail all over.

The bill is an honest one, and embodies the best intelligence and the best purpose for the public weal. But what of that? There's no "pull" in it, and professional wisdom and sanitary science are nowhere. Contumacious Dogberrys and legislative Solons are to the fore, and thick as blackberries when the summer suns come. We were going to say, "thick as thieves," but we remember that once upon a time the tailors of Tooley embodied England, so we must "stand upon the order" of our speech, and bow to law and its makers and framers. Here we might legitimately submit the propriety of the selection of our caption—heart failure—not to coroners or lawmakers, but to the higher court of scientific argument. Previously to that, however, a few additional words will show that in the whole range of easy and slangy expressions, borrowed from pseudo-science, there are none in more common and general use than those of heart failure, malaria and a visitation of God!

If ever there was a Godsend on this earth, it came to the New York Coroner's Department in those three words. But we very much doubt if the Almighty ever had anything to do with such a God-forsaken concern. They must have been made for the special benefit of New York's coroners by some very remote coroner politician, some ancestral seer or soothsayer or occultist, or perhaps some prescient broker who had a "corner" in them and speculated in "futurities." So, we take back the word Godsend and say that, if ever there was a boon given to cover up and hide shameless ignorance and pretension, it is embodied in the words heart failure, malaria and a visitation of God. The pounding of them into the public ear, to satisfy public curiosity and credulity, has pounded and driven the nails into many a coffin, to be shuffled away and forgotten. They should be written over the entrance to the Coroner's Department, or worn upon the foreheads, as did the ancients their phylacteries, to show the wisdom within, or, still better, to turn the curious eye from too close scrutiny of how little of wisdom there really was. A few words might be pertinent just here in another direction as to a possible change in the administration of the Coroner's Department, and the induction into office of a representative of a higher sphere of professional acquirement. The days of Dr. Pangloss, who overawed the "pro-

fanum vulgus" with cocked hat, beribboned peruke, and gold-headed cane, and pompously repeated "For what are we doctors," have gone by, and the immortal "Médecin malgrélui" is among the records of the past. But there is still a survivor in lineal descent, who though he may have gathered the "pulveren olympicum" in the arena of science to a degree, and rubbed elbows with professional dignitaries, yet for all that may be a mere politico-professional hack, "full of wise saws and modern instances," and not have learned anything new for twenty, maybe forty years. "The woods are full of 'em," and so are many of the municipal offices in this city. So we sincerely hope that a *live* man, and one inspired with the energy of constantly accumulating knowledge, may fill that long-continued vacuum, and that no more reports of heart failure, malaria and visitation of God may vex the public ear, and make, of the department of coroner, a thing at which shoulders may shrug and heads may wag. Of heart failure, we undertake to say that there is no such thing as heart failure, per se. No heart that ever beat, ceased to do so of itself and by itself, but because of the sudden or gradual diminution or obstruction of the subtle vital principle, nerve and ganglionic force, that animates and has animated its pulsations from the moment of its existence, as the just impregnated ovum, if the rhythmic move of that plasma of intensely vital matter may be said to assimilate it with what will soon be the true cardiac rhythm—to that other moment when it stops, like a clock run down, its last throb the faint jar of the door that opens upon eternity. The heart will cease to beat because the perfection of the mechanism of its organic structure—the anatomist and physiologist are thoroughly familiar with that wonderful perfection—has been marred and destroyed by the invasion of disease from many sources far removed, with the morbid effects of which upon the heart and its structure every physician is, or ought to be, fully instructed before he undertakes the duties of his profession. The first heart failure, so-called, of which we have any knowledge, comes to us through Holy Writ, and it recites the case of Peter, the apostolic apostate, who denied his Lord, and who, upon the crowing of the cock, that had been foretold, "went out and wept bitterly." Now in this case we must suppose, inasmuch as there is no record to show that he had any special cardiac disease, his heart failed him from an emotional cause, and under the stress of remorse he got away from the intolerable shame. What a blessing to this community at large a little more heart failure would have been, and would be, among many political incumbents, past and present. But, bless your soul, there's too magnetic a force latent in the cohesive power of the public plunder, to hope for the exhibition and exercise of any such virtue as that. There are precious few Peters left nowadays, if any, and even they, on a pinch, would most likely deny anything, and the only tears they would shed would be wrung from them by failure to wriggle into office. The second instance of heart failure that has been handed down to us, presents characteristics of a more substantial quality, indeed of a metallic nature, represented by thirty pieces of silver. When the Saviour sat in the midst of his disciples at the "Last Supper," the Ultima Coena despicted with such loving reverence by Leonardo Da Vinci, and so often since by the Italian pencil, He said: "One of you shall betray me." Then came the eager and breathless inquiry from each one: "Lord, is it I?"

The heart of him who did betray his Lord began to fail, "and he went and hanged himself." But Judas Iscariot lives more multitudinously to-day than when Christ walked the earth. The weight of the bag of thirty pieces of silver is not fatal to the physical body in our day, no matter how acquired, but if the malady strikes deep it is deadly to the best impulses of the human heart and soul, intellectual, moral and emotional. We learn wisdom sometimes from the humblest sources, and there's pith and moral sustenance enough in a lesson taught by ignorance to last a lifetime.

Said an old negro preacher, down South, to his congregation, whom he was exhorting upon the sin of covetousness and the love of money, "I tell you what de bible do say 'bout dat dar sin. It say the love of money is de root of all evil. Ef dat is so, ten it's 'stonishin' how hard you niggers, yes, and de white folks, too, tries to help one anudder out of all dat root you kin git, and I spec you is gwine to keep on trying ontel de judgment day."

Lastly, it would be both interesting and instructive to review, at length, the diseases and accidents that overwhelm the heart, and stifle its vital activity, even though in many instances its structural integrity may have been perfectly preserved. Again, it would be equally useful to note the effects of those diseases that implant their morbid products upon the cardiac structure, thus exercising a mechanical force and power upon that organ, and interposing a physical obstruction to the due performance of its functions, without which there can be no life. But the editorial dictum, thus far shalt thou go, and no farther, stops the way, and we must be content with a mere mention of some of the accidents and diseases that may and do produce the "heart failure" of the Coroner's Department, and let the reader see what a multitude of sins of departmental omission, commission and ignorance may be, and is, covered by that convenient term "heart failure."

Let us consider the morbid conditions that may affect the heart, impair its vitality and rhythmic action, with the final result of its suppression and arrest. They may be divided into intrinsic and extrinsic, the former applying to the physical heart itself, the latter derived from extrinsic sources. As before said, we simply propose to name them, and among them are found, of the intrinsic malformations, congenital and other malpostions, or as usually called, transposition—ectopia cardis—atrophy and degeneration of the cardiac structure, hypertrophy and dilatation, fatty degeneration, endocarditis, myocarditis, sclerosis, tubercle, tumors, aneurism, angina,

stenosis, rupture, persistence of the foramen ovale, or, more properly, inter-auriculare of the fœtal life—a most remarkable instance of which abnormality has just come under our observation in the Metropolitan Hospital, Blackwell's Island—with many other curious and most interesting cadaveric experiences, the patient in the first case having survived nearly three score years, and having presented but few signs pointing to this most rare and unnatural condition, and ultimately succumbing to other causes, and so might go on naming other intrinsic cardiac pathological changes not necessarily involving life. Of the extrinsic, we name the effects upon the heart of shock, mental, emotional, and other valvular depositions and vegetations from rheumatism, gout, pulmonary obstruction, pericarditis and hydropericarditis, gastric, uterine and ovarian reflexes, hemorrhage, depressing effects of the ophidian poisons and those of mineral and vegetable character, virus of hydrophobia, tetanus, eclampsia, imperfection or abstraction of the innervation of the nerve and ganglionic forces—pneumogastric, sympathetic, spinal accessory, from cerebral and spinal diseases, effects of alcoholism, opiomania, morphinomania, asphyxia, and others almost "ad libitum." In view of all this, what a happy man that blessed coroner must be, and how his satellites and adjuncts must revel in the gracious forbearance and easy gullibility of the dear public. Wipe out this foul blot upon the administration of municipal justice, this "dam-ned spot," that will not out as long as coroner and legislative pals and heelers make municipal laws and defile courts of justice, until the very name of justice in the City of New York has become a hissing and a shame.

CLINIQUE.

FOUR CASES OF HERNIA.*

By W. O. Roberts, M.D., Louisville, Ky.,
Professor of Principles and Practice of Surgery and Clinical Surgery in the University of Louisville, etc., etc., Louisville, Ky.

I HAVE recently had four cases of hernia which were operated upon, each of which contains some points of interest.

Case I.—A girl, æt. fifteen years, who had an inguinal hernia of the right side, which had existed since early childhood. She was able to wear a soft truss until eighteen months prior to the time I saw her, when the truss gave her a great deal of discomfort. She did very well with a truss excepting at her menstrual periods, when the pressure caused her to suffer intensely.

Upon examination, I found the greater portion of the hernial tumor could be reduced. There was one portion, however, that could not be reduced, and this was hard and quite sensitive. I suspected from the history of the case that it was likely a hernia of the ovary, and, upon cutting down upon it, I discovered that to be the fact; it was a hernia of the right ovary. The ovary was undersized; it was enucleated, then the sac was removed and the opening closed. She got along without an untoward symptom, but even now she tells me that she has had two menstrual periods since the operation, and at each one there has been some tenderness and dragging sensation about the site of the hernia. There has been no recurrence of the tumor.

This is the second case of hernia of the ovary that has come under my observation. The other like this was an inguinal hernia. The same operation was done upon both patients.

Case II was an inguinal hernia occurring in connection with an undescended testicle. The patient is a young man, twenty-one years of age, and of course the hernia was congenital. The tumor had escaped into the scrotum, and was about the size of a small orange. This patient could wear a truss, but every now and then he would feel the pressure of the truss upon the undescended testicle, and frequently would be laid up in bed for several days because of the orchitis brought about by pressure of the truss.

Cutting down upon the tumor, I found that the sac extended down into the scrotum, with the intestine in it. I did not reduce it purposely before making an incision, and the testicle was not found at first—simply an enterocele. After reducing the bowel and peeling off the sac, the testicle showed itself at the external ring. I caught hold of it and endeavored to pull it down, but could only get it just a little distance beyond the external abdominal ring. The testicle was found to be in a cystic condition. I opened the canal, removed the testicle, and did a radical operation for cure of the hernia. The patient has gotten along without trouble, has had no recurrence, and it has now been four months since the operation was performed.

Case III.—Another patient recently operated upon was a man sixty-five years of age, who had a double hernia. He had never had any trouble in keeping the hernia up by the use of a truss until the day before I saw him, and then the hernia on the right side came down and became strangulated. This patient, so the physician in charge told me, had had for quite a while considerable sugar and albumen in the urine. I did an operation for the radical cure of the hernia. On the fourth day there was a chill and fever. I found that the drainage was defective, and passing a grooved director up and opening a dependent portion of the wound, I removed about a tablespoonful of pus. Immediately afterward the fever subsided, and the man made an uninterrupted recovery. The operation was done four weeks ago; I saw him yesterday and he was up and about, just starting out to take a street car ride. This morning at five o'clock I was called by telephone to come and see the patient, that he was dead. Upon arriving at the house I found that his death was not due to the hernia nor the operation; he had committed suicide by cutting his throat.

Case IV.—The last case was operated upon ten days ago, child eight months old, who had

* Reported to the Louisville Surgical Society, and stenographically reported for this journal by C. C. Mapes.

a congenital hernia that was noticed soon after birth. The opening was quite large, and they had been unable to keep the hernia up by means of a truss. A number of trusses had been used for the purpose without success. I did an operation for radical cure in this case, and the patient has gotten along without an untoward symptom, and will be taken home to-morrow.

DISCUSSION.

Dr. W. C. Dugan: What radical operation have you been performing?

Dr. W. O. Roberts: Except in the congenital cases, I have done the Bassini operation. In the last case I removed a portion of the sac, as I always do in congenital herniæ, and then stitched it over with catgut, then closed up the ring with silk. I would like to ask the members, in discussing the cases, whether they have met with hernia of the ovary, and if so, whether the hernia was inguinal or femoral?

Dr. W. L. Rodman: I have never seen a case like the first one reported, a hernia of the ovary. Dr. Jas. S. Chenoweth reported to this Society an interesting case of the kind. The course pursued by Dr. Roberts in the case of hernia accompanied by an undescended testicle raises a very interesting question, one which has been frequently brought up before, viz., what shall we do with the testicle in such cases? I am satisfied that he pursued the proper plan in removing the testicle. I believe it should be done, not only because it assures a perfect result as far as the hernia is concerned, but I am also of the opinion that the vast majority of these undescended testicles should be removed, for other and good reasons—first, they are always small, imperfect and usually functionless, and in the second place, they are exceedingly prone to undergo sarcomatous change. I have recently encountered a case where there are two undescended testicles—a cryptorchoid. In one of them the testicle has been in the canal, and has been subjected to a great deal of pressure. The patient is a laboring man, and it has undergone repeated attacks of inflammation, and I am quite sure that the testicle has undergone sarcomatous change, and that the tissues all around the testicle have become so infiltrated that it would have been useless to have removed the testicle at the time I saw him. And on account of the fact that these organs are usually small, imperfect and without function, and that they are a perpetual menace to life, I think, as a very general rule, they should be removed.

Dr. H. H. Grant: Like Dr. Rodman, I have had no opportunity to examine or report a case of hernia of the ovary. With respect to the treatment of undescended testicles, I am disposed to view the subject very much as he does, although I think it is still a matter of some question whether or not a certain degree of function does not exist in undescended testicles. There is no positive proof that they have no function, and a number of authorities are of the opinion that they should not be removed if they can be drawn down into the scrotum, returned to the abdominal cavity, or stored away in a safe place, where pressure will not be brought to bear upon them. My experience with conditions of this kind is limited entirely to theory. I have seen a number of such cases, but have not had an occasion to operate upon any of them, and I think if I should have an occasion to operate I would be disposed to bring the testicle down into the scrotum if it could be accomplished. If this could not be accomplished, and there were evidences of normal size, and any indication of probable function, I should endeavor to put it away in the neighborhood of its immediate surroundings, where it would be safe from pressure, and would doubtless afford its owner a chance of function if he should by any accident be deprived of the other testicle.

I am not aware of any positive scientific evidence that these testicles are more prone to undergo sarcomatous degeneration. Dr. Rodman tells us so, but I do not consider it an established fact by any means, and was rather surprised at his positive statement. If there is any such authority, he did not quote it, and I do not believe it is a condition that is more particularly prone to occur in the undescended than in the descended testicle.

In regard to the operation Dr. Roberts speaks of, where he removed the testicle, it seems to me if it were necessary to divide all these tissues, nothing could have been wiser than to close them up after the method of Bassini; although the operation described by Bassini would not have been necessary, because the cord would not have been allowed to remain; it would have been taken away, and the entire canal taken up without making any artificial opening for reception of the cord.

Dr. James S. Chenoweth: I have seen one case of hernia of the ovary, operated upon three years ago. It was an extremely interesting case to me, and I had the patient under observation two years before operation. There was very little difficulty about the diagnosis; a tumor was present for a long time, and it was a femoral hernia, which, I believe, is a very rare variety of hernia of the ovary. The patient was thirty-five years of age, and, as I have said, there had been a tumor for several years. It usually became very tender and was enlarged at the time of her menstrual periods; bleeding was very profuse, and she had considerable ovarian irritation. The tumor, during the menstrual period, and it happened that I was first called during that time, looked very much like an ordinary strangulated hernia; but from the history of the case it seemed very plain what the trouble really was. Throughout the menstrual period a resisting mass could be detected, which did not feel like anything I had ever felt in a hernia. I was unable to reduce this mass perfectly; it seemed to be adherent to the ring. A pad was put over it, which she wore for a considerable length of time. Her husband refused to allow her to submit to any operation for a cure.

About a year afterward the patient came to my office with a decided enlargement in the groin. Upon examination I found she had a hernia of the gut down at the outer side of this ovarian her-

nia. I reduced this, and cautioned her about straining or anything of this kind that would likely cause it to come down, telling her that it might become strangulated, as she could not wear a truss. She returned home, and the next morning after I had reduced the mass it came down again and became strangulated. I sent her to the Infirmary and operated immediately. She was put upon the operating table, and as she went under the anæsthetic, and the muscles became relaxed, the hernia of the gut slipped back. I cut down upon the enlargement and found the ovary and the extremity of the fallopian tube in the hernial sac. The sac was as large as a hen's egg, and contained probably an ounce of clear fluid. After opening the sac and evacuating this clear serous fluid, the ovary appeared in view; it was very small, and was found with the end of the fallopian tube in the bottom of the hernial sac. The peritoneum and sac were adherent to each other at the ring where the sac came out from the abdominal cavity. A second opening was found toward the outside, where the gut had forced itself down. There was no communication between the sac which contained the ovary and tube, and the hernia of the gut. The ovary was removed and both openings closed, so as to avoid the occurrence of further trouble. The patient made a good recovery, and when last seen there had been no recurrence of the hernia.

The subject of hernia accompanied with undescended testicle is extremely interesting. I operated upon such a case, which Dr. Roberts will remember, at the University Clinic some time since. The patient was a man twenty-three years of age, in perfect health in every way except the hernia, which occurred on the left side, with the testicle in the canal. I saw him five months before the operation. By occupation he was driver of a beer wagon, and in lifting a beer keg off the wagon he had strained himself; there was sudden pain in the groin; he was carried home and put to bed. When I saw him the next day there was quite an enlargement. By means of an aspirator I drew off about four ounces of clear fluid. At that time I could feel the testicle in the canal. Three or four months afterward, he having had no further trouble in the meantime, the mass commenced enlarging, and I found that he had a hernia which had come down behind the testicle, carrying with it a portion of the omentum. He was put upon the table for operation. He did not take chloroform very well, and after opening the sac and freeing the omentum he collapsed under the anæsthetic; he took it very badly and struggled a great deal, became very blue, and I had to stop the operation. I had just gotten the omentum all out of the sac and pushed it back into the abdominal cavity. I then closed the ring without removing the testicle, bringing it down as well in the scrotum as I possibly could, and closed the wound, making provision for drainage at the lower angle I closed the abdominal ring with catgut sutures, endeavoring not to press upon the cord too much. The cord was extremely thick, which would have made it very difficult to close the opening in the abdomen, and any radical operation would have been impossible without removing the testicle or without cutting away most of the cord. But under the force of circumstances I had to complete the operation quickly, to get the patient off the table alive. Twenty-four hours after the operation a great deal of swelling took place in the region of the wound, the scrotum became enormously swollen, and he suffered a great deal of pain. I had to give him chloroform the second time thirty-six hours after the operation, and take out all the stitches, which failed to relieve the tension. I then extended my incision on down to the bottom of the scrotum. It seemed necessary to do this in order to save the scrotum. Sloughing continued and spread over to the other side. I then made another incision down the other side of the scrotum. Thirty-six hours afterward the wound commenced to swell from the outer side of the original incision. I then had to make another incision three or four inches in length, back over the crest of the ilium. The whole incision was now fifteen to eighteen inches long. He finally pulled through; the testicle is still in place and everything adherent around it. Some of the ligatures came away from the stump of omentum through the wound. I shall probably remove the testicle later.

In cases where the cord is thickened in this way, where it is possible the testicle had better be sacrificed and a radical cure performed, as it is almost impossible to close the ring without constricting such a cord.

Dr. W. C. Dugan: In answer to Dr. Roberts' question as to the first case: I have yet to see my first case of hernia of the ovary. Like the other speakers I have heard of them, but have never met with such a case.

With regard to the undescended testicle: It is certainly a question that is not settled by the authorities as yet. I am rather surprised to hear Dr. Grant state that he did not know undescended testicles were prone to undergo sarcomatous changes; I believe he must have seen such statements by good authorities, and has lost sight of the fact. Several years ago Dr. Marco, of New York, in discussing this subject, stated that they were extremely prone to undergo sarcomatous changes, and McBurney has only recently reported such a case; I do not think the idea traditional by any means. However, I do not think we should treat such cases with any ironclad rule. If we find cases where the testicles have been injured a number of times; where they have been the seat of severe orchitis and the patient is unable to wear a truss, I think the testicle should be removed. But if we operate early in life of the patient, where there is no history of injury or inflammatory trouble in the testicle, I should be very loath to remove it. I am glad to hear Dr. Grant say he would replace the testicle in the abdominal cavity. I have stated before this Society on a number of occasions that I believed this would be the future operation for hernia, in all cases where the consent of patient can be obtained, and espe-

cially in all those accompanied by undescended testicle. We all know that is one of the drawbacks to radical operation, that where we leave an opening for the cord we leave a weak wall; that is certainly the greatest trouble in these operations. But where the testicle is removed and the opening closed as Dr. Roberts has described, we have no chance of recurrence of the hernia. Where there is no history of injury or inflammatory trouble, I believe it is better to replace the testicle in the abdominal cavity in those cases where we cannot bring it down into the scrotum. I have removed the testicle in several cases, first securing the consent of the patient.

Concerning the operation where we have congenital hernia, I think the sac should be dissected from cord, tied off as in other cases, etc., cut away, and the cord placed as far from the median line as possible, if necessary making a section of the internal oblique, even extending out as far as the transversalis, so as to place the cord as far from the median line as we possibly can; then make your internal abdominal ring there and bring down the fibers, suturing them to the parts below, then closing up the opening by the Bassini method. There is one vast difference in the Bassini and Halstead—the former restoring the canal and thereby making a valve-like opening, and the latter leaving the cord to pass directly through, yet it has been said the only difference is that Halstead removes the veins, and this makes the cord smaller. I am certainly in favor of removing the testicle in all cases where there is any evidence of injury, or where the patient is unable to wear a truss, or where a truss has been worn against the testicle for years or any length of time, or where there is marked evidence of inflammatory trouble. I am partial to the Bassini, and have been doing it for several years. It is the most simple and by far the most rational of all operations. It meets the two essential factors in the pathology of hernia. First, does away with the depression at the internal abdominal ring; second, restores the canal and leaves what was a weak wall to one unnaturally strong.

Dr. W. L. Rodman: I am glad the discussion took the turn that it did. In the first place, I have had in the last two years rather a remarkable experience with undescended testicles. I am sure I have seen six or eight cases, which is an unusual number for a man seeing the number of patients that I do. Further, I have seen in my limited experience two cases of well-marked sarcomatous disease in undescended testicles. One of them was also seen by Dr. Roberts about two years ago, a remarkable case brought here from Bowling Green. The boy afterward died. The second case I spoke of a few minutes ago.

Now, there is most positive evidence to the effect that the vast majority of patients who have two undescended testicles are sterile. In two cases that I have seen where both testicles were retained in the inguinal canal, while the men were very strong and robust looking persons, there was no evidence to show that they could impregnate a woman. They were both married, their wives being strong, healthy women, yet they were childless. The observations of Curling and others show clearly that a large proportion of cryptorchids and some monorchids are sterile. It also depends to a certain extent where the testicle is. If it is retained in the abdominal cavity, where it is not subjected to pressure, then it will not undergo repeated attacks of inflammation, and is not so liable to sarcomatous change.

The most important question to be considered is what shall we do with the testicles in this class of cases? The only reason I said, when I first spoke, that I would sacrifice the testicle in cases such as Dr. Roberts spoke of, was because it was small, imperfect, and on account of the fact that these testicles are so prone to undergo malignant change. Now, if I encountered a case where I thought the testicle looked reasonably well, and of about the proper size—and I always make it a point to carefully examine the testicle in such cases—I should bring the testicle down into the scrotum if possible; or I would do the operation which is being done by Dr. Dawbarn, *i. e.*, replace the testicle in the abdominal cavity. It is believed by Dr. Dawbarn that this will be the operation of the future, because we thus get rid of the testicle and cord, which should very largely reduce the liability of recurrence of the hernia, and when we have done this we will have made a very decided step forward. Dr. Dawbarn performs the Bassini operation, the only essential difference being that he takes the testicle and wraps the cord around it, then he transplants it, putting it just inside the internal abdominal ring, not, however, in the peritoneal cavity. There is good reason for this, because it has been shown very clearly by experiments upon the lower animals that if the testicle is placed in the abdominal cavity it very soon atrophies, even if it be the normal size when so transplanted.

Dr. W. O. Roberts: Concerning the first case I reported—hernia of the ovary—this form of hernia is quite rare. I find no specific tables on the subject excepting in "Hamilton's Surgery;" he has a collection of eighteen cases. Other authorities I have consulted state as regards treatment if the ovary is found small and degenerated, the proper procedure is to remove it, along with the fallopian tube, and where it is found in a healthy condition to return it and close the opening. In both of my cases the organ was very much undersized—rudimentary.

In regard to undescended testicle: I will state that I have operated upon a great many such cases, and have only found one instance in which I could get the testicle down into the scrotum. That case was operated upon recently, and Dr. Rodman came in at the close of the operation. Both testicles were undescended, only the one on the right side was accompanied by a hernia. In that case I succeeded in getting the testicles down into the scrotum and anchored them there, and also did a radical cure for the hernia. I heard from the case several months after and was told that the operation was so far very successful, that the testicles were still down in the scrotum.

The New York Medical Times

A MONTHLY JOURNAL

OF

MEDICINE, SURGERY, AND COLLATERAL SCIENCES.

EDITORS:

EGBERT GUERNSEY, M.D. ALFRED K. HILLS, M.D.

Business Communications should be addressed, "Publishers, 526 Fifth Ave.," and Checks, etc., made payable to THE NEW YORK MEDICAL TIMES.

Published on the First of each month.

NEW YORK, MARCH, 1896.

Changes of standing advertisements and communications in regard to that department, should be addressed to BENJ. LILLARD, Advertising Manager, 19 Liberty St., N.Y.

EVERY SUBSTANCE WHICH, IN LARGE DOSES, ABOLISHES THE PROPERTY OF AN ORGANIC ELEMENT, STIMULATES IT IF GIVEN IN SMALL DOSES.

—*Claude Bernard.*

ASEPTOLIN.

IS there another new specific? Has tuberculosis, which according to the report of the State Board of Health, is responsible for 10 per cent. of all the deaths which occur in the State, at last found its master, its death dealing germs themselves struck with death by its potent influence? Koch aimed at producing this result, and claimed that the long sought specific which was to rid the world of one of the most deadly foes to human life had been found, but the bright anticipations have vanished in the darkness of at least a partial failure. Will Dr. Edson, the new claimant for having at last found the long sought specific, which has heretofore eluded the grasp of the scientists, be any more successful than his predecessor? Whatever may be the logic of his theory and however bright may be his anticipations, the profession have grown wise by experience, and will only crown him with the laurels of the victor, when it has been actually demonstrated he can accomplish what he claims.

Starting from the fact already established by the chemist, that a small amount of phenol is almost always found in the healthy urine of persons fed on a mixed diet, which is always enormously increased during disease, he deduces the opinion that the increased secretion of phenol by the system in disease is one of Nature's devices to cure the underlying condition by this agent, which destroys that germ life whose poison produces disease with all its pathological changes and painful symptoms.

Not satisfied with the results of the chemically pure phenol of Duclat, which in its various combinations enjoys a deserved popularity in the treatment of malarial and respiratory conditions, he sought to obtain it in a form which, when injected hypodermically, would be free from irritating and toxic effects, and yet contain sufficient of the phenol to turn the scale in favor of cure. To accomplish this result the phenol, distilled directly from the hydrate, is subjected to additional distillation, heating the vapor as it passes from the retort to the receiver in an oil jacketed tube and then condensing in a double stoppered receiver, rejecting the first 10 per cent. and utilizing the remainder, except the last 10 per cent. This purified phenol is diluted with distilled water until the percentage of phenol is reduced to 2.75 per cent. Into the receiver into which this is placed a certain proportion of alkaloid pilocarpine is added, so that as the phenol distils over and condenses, it combines with the philocarpine in the production of the fluid.

This fluid, to which the author has given the name of *Aseptolin*, is chemically a pilocarpine-phenol-hydro-oxide, and is given daily in cases of phthisis, hypodermically, preferably in the parietes of the abdomen, in doses of 50 minims, increasing 10 minims every day until a hundred has been reached, at the same time carefully watching the symptoms, and discontinuing if necessary. At the same time, to keep the larynx and bronchi free from infective material, a spray is used once or twice a day, composed of 10 parts of iodoform and 90 parts of ether.

The reason assigned by the author for the combination of pilocarpine with the phenol is that it is not only an expectorant, but it induces leucosytosis and stimulates glandular activity.

It will be seen that Dr. Edson builds his theory upon the combination, in as pure a form as they can be obtained, of two of the most efficient and well-tried remedies in our materia medica. At the request of Calvert, but little over thirty years ago, we introduced phenic acid to the profession and the hospitals in this city, when it was only known through its just beginning English reputation. The startling results obtained from it here and abroad, not only as a disinfectant, but as a germ destroyer in malarial, typhoid, respiratory and infectious diseases, has placed it as one of the most important drugs in the physician's repertory, leading the way to the discovery of that long line

of coal-tar preparations, which have by their wonderful beauty and power taken the artistic and medical world by storm. The powerful action of pilocarpine as a gland stimulant, and thereby an eliminator of effete matter, is only just beginning to be understood, but enough of its action is known to give it a high rank in our materia medica.

It remains to be seen, however, whether the action of these powerful drugs, whose separate pathogenesis has been so carefully studied and proved, will, when combined, gives to the world the long sought destroyer of tubercular bacillus. Possibly the combination may develop a power which, like the tempering of the Damascus blade, will render it invincible. We will wait for further proofs, not endorsing or condemning.

But in seeking for a destroyer of the bacillus after it has already commenced its ravages in the system, let us not forget the nose as a germ destroyer and a protector to the lungs. The air is so full of microbes, that, according to Drs. Thompson and Hewlet, from 1,500 to 2,000 micro-organisms are inhaled into the nose every hour. The nose acts as a sterilizer; the mucus it secretes, while it does not kill the microbes, prevents their developing. The danger to life and health arises from the immense power of multiplication of the micro-organisms, and when this is checked by the mucus of the nose, they are swept on by the cillia to the digestive tract, where they meet the common fate of all food which reaches that locality. Keep the nose and stomach in good condition, and you have but little fear of micro-organisms inhaled in the air. All micro-organisms, including tubucular bacillus, require a certain soil to develop and thrive, which soil contains a deficient vital force, produced by some violation of Nature's laws.

IMMORTALITY.

IT is a curious fact that whatever a man may accomplish, his name goes down to posterity, if at all, in connection with some one event or act of his life. Bishop Heber, long after his splendid work as a Bishop had been forgotten, will be remembered as the author of "From Greenland's Icy Mountains," composed in his father-in-law's study on the eve of a missionary meeting. Bret Harte, no matter how much brilliant work he has accomplished, will be forgotten except as the author of the "Heathen Chinee." Dr. Muhlenberg's name will go down to posterity not as the founder of St. Luke's Hospital, but as the author of the hymn which has touched, as with a benediction, so many sad and weary souls, "I Would Not Live Alway." Dr. John W. Francis, whose house was the center of literary, social and scientific culture for many years, once said, in a pleasant chat with his witty companions: "I am sure of immortality. Posterity will not forget me, for as long as men have bowels they will take the triplex pill (of which he was the originator), and will remember John W. Francis."

The Dover powder of Dr. Thomas Dover, has been prescribed by more physicians during the past 200 years than any other medical combination, and is still in popular use. Dr. Dover was born in 1660, and was a B. M. of Cambridge. He was a pupil of Sydenham, and a successful practitioner and author. When Dr. Dover, after a critical study or in a moment of inspiration combined by careful trituration 8 parts of nitrate of potash, 1 of ipecacuana and 1 of opium, the famous *Pulvis Ipecacuana Compositus* or Dover powder was born, linking the name of its author with immortality, as it was carried down through the ages. It occupied a conspicuous place in every drug store and in the repertory of almost every physician. Capt. Thomas Dover, the celebrated buccaneer, the discoverer of Alexander Selkirk (Robinson Crusoe) on his lonely isle, who returned him to his native country, has long since been forgotten, but Thomas Dover, B. M., the friend and pupil of Sydenham, the for a time popular physician and author, still lives after the lapse of nearly 200 years, in his Dover powder.

RAPID DISINFECTION.

THE delay and annoyance of quarantine have been so great in times past that Dr. Doty, the energetic and efficient Health Officer of this port, proposes to inaugurate a new system which will complete the work of disinfection of passengers and steamers in a few hours. In this purpose he proposes to utilize the steamer *Ripple*, which used to carry passengers from Babylon to Fire Island, and which was acquired by the State when Fire Island Beach was purchased for quarantine purposes.

At a cost of $6,000 Dr. Doty finds that he can fit up the *Ripple* with a complete disinfecting plant. The alterations contemplate the erection on the after deck of two series of disrobing rooms, bath-rooms and dressing rooms, women's quarters being on the port and men's on the starboard side. Between them is to be erected a chamber for the disinfection of clothing, either by steam or dry heat. When an infected ship comes into port it

is intended that, after the removal of the sick, the *Ripple* shall go alongside and take aboard all her passengers and crew.

As fast as received they will be required to disrobe and then pass into the bathrooms, in each of which four persons can be bathed simultaneously. After the bath they will be supplied with wraps and wait in the dressing room until their clothing has been returned to them, after passing through the disinfecting chamber.

After the passengers and crew have undergone the treatment all the ship's bedding will be put through the hot chamber, and while this is being done every part of the ship herself will be disinfected by spraying with a bichloride of mercury solution and sulphur fumes, conducted from tanks and furnaces on board the *Ripple*. Except in the case of the very largest ships, it is believed the process can be completed, and the thoroughly disinfected vessel permitted to proceed in about two hours. The present system of taking passengers to Hoffman Island for disinfection causes a delay of at least one day and often more.

STATE BOARD OF HEALTH.

THE annual report of the State Board of Health states that the bacillus of tuberculosis may find its way into the human system through the medium of milk from infected animals. The danger from the flesh of such animals is practically overcome by the process of cooking, and also because the muscles of animals are often free from disease when the glandular system and even the lungs are markedly tuberculous.

A somewhat careful calculation shows that to destroy all the cattle affected with this disease in the State to-day would involve an expenditure of nearly $1,000,000.

The tremendous importance of this work, the report says, may be fully realized when it is stated that of the deaths occurring in the State during the year, over 10 per cent. were from pulmonary consumption. Hence, it is the unanimous opinion of the Board that that no other question affecting the public health is of such vital importance, and that the Legislature should be urged to make an appropriation liberal enough to prosecute the work of the committee with the utmost vigor.

HOMŒOPATHIC MEDICAL SOCIETY OF THE STATE OF NEW YORK.

THE forty-fifth annual meeting of the State Society commenced at Albany, February 11th, Dr. Jones in the chair. The attendance was small, and the reports and discussion of interest, but not calling for special mention, as in due time they will reach the members through the published transactions. The Committee on the President's Address reported in favor of that portion offering opposition to the bill now pending in the Legislature to allow medical schools and colleges to determine the qualifications necessary for matriculation. Also calling on the Legislature to pass a law prohibiting the Licensing Board from granting licenses to doctors from other States where the standard of examination was not of so high a grade as in this State.

They reported unfavorably on the resolution asking the Legislature to amend the law under which physicians are compelled, when they move from one county to another, to send their diplomas for inspection.

Dr. E. H. Wolcott, of Rochester, was elected President. The fall meeting will be held at Rochester, the date to be announced later.

SERUM CURE FOR THE PLAGUE.

GREAT excitement has been caused in sanitary and medical circles in Japan by the announcement of a celebrated medical specialist, Dr. Kitasto, that he is able to produce a serum capable of arresting the plague in a few hours after having been injected into the veins of the sufferer. Dr. Kitasto also claims to be able to cure diphtheria and cholera, and to neutralize the virus of the lepra bacilli also with the same serum. On account of Dr. Kitasto's great reputation the announcements are believed.

SUPPRESSION OF URINE AFTER ABDOMINAL SECTION.—This condition is by no means of rare occurrence, and unless carefully watched and the conditions promptly met, may end in convulsions and death. Dr. Eugene Bois, in discussing the subject in the "Annals of Gynæcology and Pediatrics," says the amount of urine secreted depends on the relation of the blood pressure within the capillaries of the glomeruli to the pressure within the convoluted tubules and efferent vessels. The amount of urine secreted depends on the fullness of the renal artery and the velocity of the current through the capillaries. Severe or continued contraction of the renal vessels will necessarily cause marked diminution in the quantity of urine secreted or suppressed. Therefore, any factor which causes severe contraction of the renal vessels may cause suppression. Dr. Boise believes the suppression is due to the direct irritation of abdominal vessels by opening the abdomen, ag-

gravated by reflex irritation of the renal plexus by injury to other parts of the abdominal sympathetic, causing contraction of the renal arteries; also to the direct depletion of the blood vessels, thus lowering the pressure by the removal and withholding of fluids, and possibly also to the irritant effect of the anæsthetic. Dr. Boise recommends great care in the use of ether, and seeks to replenish the blood vessels by the free use of hot water by the rectum immediately after the abdominal section. The hot water is rapidly absorbed, and brings the soothing effect of heat in close contact to the renal and solar plexuses, allaying irritation and relaxing the arterial spasm. Among the remedies used to relieve the arterial spasm, codein and nitro-glycerine are considered most effective.

HOW TO AMPUTATE.—The *New York Medical Journal*, of November 16, 1895, contains a valuable article, by Dr. John A. Wyeth, on "How to Amputate" (*Am. Med. Rev.*). He points out that in every amputation the preservation of the life of the patient is the first great principle to bear in mind; the second is to preserve the greatest amount of usefulness for that part of the member which is left with the body. Since hemorrhage is the chief factor of shock, to prevent loss of blood is essential. Practically, every amputation should be governed by these laws.

When hemorrhage has not occurred before the case is in the hands of the surgeon this element of danger may, thanks to modern surgery, be eliminated. There is not an amputation, from the fingers to the shoulder joint, or from the toes to the hip joint, in which hemorrhage cannot be eliminated as a factor of danger to the patient's life. And even when extensive bleeding has occurred before amputation is undertaken, the introduction of hot salt solution into an exposed vein, or in a vein at the bend of the elbow, does much to eliminate the danger of shock from hemorrhage. Beyond the saving of blood and of as much of the limb as possible, says Dr. Wyeth, I have never practised any fixed rules as to how to amputate, even in the formation of flaps. We should make the flap always with a view of saving as much as possible of the limb.

Of the seven hip joint operations performed by his own method, the only patient lost was a young man, about nineteen years of age, with a sarcoma of the knee. Dr. Wyeth says that in Syme's operation he has modified the incision, and now carries it from the tip of the malleolus on either side directly downward, parallel with the axis of the leg. He uses a drainage table through which aseptic irrigation is made every day or two.

In order to secure rapid amputation, Dr. Wyeth, after tying large arteries, passes deep catgut sutures through the masses of muscle. In this way, the muscles are brought together, compression exercised, and bleeding prevented. His last hip-joint amputation, done by the bloodless method, was completed in twenty-five minutes.

EARLY DIAGNOSIS OF CANCER.—In its November issue, the *Therapeutic Gazette* (*Am. Med. Rev.*) alludes to the immense importance of being able to make an early diagnosis of cancer of the cervix, since, when this is done, modern improvements in technique are such as to allow of successfully dealing with a local disease. He states that the diagnostic signs, to obtain the maximum amount of usefulness, must be comparatively easily found when looked for, and their verification must not require any processes which demand a large amount of time and care and special knowledge on the part of the practitioner.

If in any given case under examination the results obtained by palpation and the closest inspection are such as to leave any doubt in the mind of the practitioner as to whether the condition is or is not early cancer of the cervix, the doubt will be invariably cleared up by ascertaining the amount of friability of the tissues. If the suspected portion be thoroughly exposed by a suitable speculum, and the uterus held steady by the volsellum, if the disease is malignant, a firm scrape with a sharp curette or spoon will enable the examiner to obtain a definite, distinct piece of tissue, larger or smaller, according to the extent of the infiltration and consequent friableness of the tissue thus operated upon. If it is not malignant, the firm scrape with the sharp curette will only make the parts bleed, and, at the most, some small, thin, shred or pellicle of semi-translucent epithelium or of granulation will be obtained.

EPILEPSY.—We find in the *Press Medicale* for Jan. 1st an article by Mr. Bexhtereff, of St. Petersburg, giving the details of the treatment of epilepsy by a new method, which has been attended with marked success. He puts of the leaves of *adonis vernalis* about 30 or 40 grains in five ounces and a half of boiling water, filters, and adds from 150 to 170 grains of bromide of potash, from two to three grains of caffeine, and of this mixture gives from four to eight teaspoonsful a day in water or in sweetened milk. With this treatment he claims always to have produced an entire cessation of the attacks, or a diminution in their intensity and frequency.

ACCORDING to reports two large public advertising schemes have gone into the hands of receivers within a short time, viz.: The Columbia Chemical Company, of Washington, D. C., and Harriet Hubbard Ayers' concern, in this city.

An exchange says:

"The eyes of many publishers throughout the country have in imagination been fixed now and then during all the events of the past week on Washington, the late headquarters of the Columbia Chemical Company, whose clever advertising during the past year or more has attracted notice, and whose affairs have been thrown into apparently hopeless ruin."

We commiserate our fellow publishers who may be creditors. The TIMES has no financial interest. Perhaps these events may teach some others to confine their efforts to the profession and keep away from the public.

Physicians are apt to condemn any medical article which is hawked to the public.

TEA cigarettes, instead of tobacco, are becoming a fad among ladies in England, and are calculated to do a vast amount of injury. It is very common in aristocratic circles to see them passed around after dinner, the tea cigarettes to the ladies, and the cigars to the gentlemen. One is about as injurious as the other.

A MOST interesting and animated discussion of the subject of "Vaginal *versus* Abdominal Section" took place recently at the Academy of Medicine, in this city. Dr. W. M. Polk introduced the subject in a short paper. Dr. E. W. Cushing, of Boston, followed with a paper, concluding with views of the various stages of the "vaginal" operation upon the screen. Both disputants stated that they preferred the "vaginal" operation in a majority of cases.

Drs. Daland and Noble, of Philadelphia, who discussed the subject at considerable length, were equally positive that the "abdominal section" was the better method.

Drs. Lusk, Cragin, Boldt, Mundé and Gill Wylie also discussed the subject from various standpoints.

The *consensus* of opinion was certainly in favor of the "vaginal" method, although the advocates of the "abdominal" made a most successful showing.

Dr. Polk made a masterly and intense rejoinder to the debate in behalf of the "vaginal" procedure, in which he said that every speaker had failed to realize the great principle which was involved, viz., our ability by early operation in this way to minimize what would later be a more serious operation.

The meeting, which was the event of the season in the Academy, was followed with the usual collation, and lasted until midnight.

MALARIAL PLASMODIUM.—The claim, freely made, that a correct diagnosis can always be made from a microscopic examination of the blood does not seem to be well founded. Dr. Maynard, of the East Indian service, where the malarial plasmodium would most likely be found, says that in over 120 cases the Laverian organism was found in only 25 per cent. Dr. Crombie, another Indian surgeon, very seldom found the organism, although the blood of malarial patients was submitted over and over again to the most careful examination. The symptoms of malarial persons, as a general thing, so clearly indicate the nature and treatment of the disease, that the microscopic examination casts but little light upon the origin of the disease or the treatment.

CORRECTION.—It is difficult to guard against typographical blunders, however careful the proof-reading, but sometimes the error originates in the editorial sanctum, which is the more vexatious, as the reviewer has no one to blame but himself. In a recent review of a very excellent work on "Diphtheria and its Associates," by Lennox Brown, F. R. C. S., which we had read with pleasure and profit, we found it in the TIMES credited to Lennox B. White, F.R.C.S., editor. We sincerely apologize to the author for an unaccountable blunder on our part.

In the review of Dr. Jacobi's work on "Infancy and Childhood" the substitute of *surgery* for infancy was evidently one of those typographical blunders which so often vex the soul of an editor.

THE JAPANESE ICE BAG. Dr. A. M. Phelps states in *Pediatrics* that he has recently had occasion to examine and use the Japanese paper ice bag, and finds that it fills all the requirements of the rubber bag, in the treatment of joint diseases and acute rheumatism. The rubber ice bag is an expensive, cumbersome and heavy affair. The Japanese ice bag is inexpensive and quite durable, and can be folded up and packed in a physician's valise, ready for use at any time; when in this shape it takes up less room than a thick piece of paper. It is softer, lighter and more agreeable to the skin than rubber.

THE UNION of the Lenox and Astor libraries, with the addition of the Tilden, will give to the public the largest library on this continent, and one of the most valuable in the world. The new organization is exceedingly fortunate in securing as its librarian Dr. John S. Billings, undoubtedly the best bibliographer in this country. His catalogue of the Surgeon General's library of 90,000 volumes, published by Congress, is an evidence of his extensive information and the thoroughness of his work. Next to an exhaustive library gathered under one roof is its classification, so that any desired subject can be reached, and this, under the direction of Dr. Billings, will be obtained in the New York Public Library.

TWO bills are now before the Legislature in this State, in which not only our own profession, but the whole State have a marked interest. One is the appointment by the State, or by judicial authority, of experts, who are called upon to testify in cases where life or death may hang upon the testimony of a medical-scientific expert. The other abolishes the office of coroner, restoring his judicial duties to the legal system of the State, abolishing coroners' juries, and making the examiners purely medical officers.

BIBLIOGRAPHICAL.

SECOND ANNUAL REPORT upon the Births, Marriages, Divorces and Deaths in the State of Maine for the year ending December 31, 1893. Augusta, Me., 1895; Registrar of Vital Statistics of the State.

DR. W. R. HAYDEN has issued a little brochure covering the "History of Anæsthesia and Painless Surgery," in which he recognizes the debt of gratitude due the discoverer of anæsthesia, the late Dr. Morton. The Massachusetts General Hospital, Boston, will celebrate the semi-centennial of this discovery on October 16th next, with demonstrations suited to the occasion.

DR. G. FRANK LYDSTON, of Chicago, has in preparation a book of doctor's stories called "The Tales of a Talkative Doctor," to contain humorous and pathetic sketches. The contents will comprise:

Character sketches from real life; psychological studies; satire of current medical follies; dialect stories and everyday medical philosophy gleaned from the life of a busy doctor, together with the "Rhodomontades of a Sociable Skull."

A MANUAL OF MEDICAL JURISPRUDENCE AND TOXICOLOGY. By Henry C. Chapman, M. D., Professor of Institutes of Medicine and Medical Jurisprudence in the Jefferson Medical College of Philadelphia; Member of the College of Physicians of Philadelphia; of the Academy of Natural Sciences of Philadelphia; of the American Philosophical Society and of the Zoological Society of Philadelphia. Second edition, revised, with fifty-five illustrations and three plates in colors. Philadelphia: W. B. Saunders, 1896; pp. 254, octavo. Price, $1.50.

As the title indicates, this is a book adapted to the medical student especially, and may be of great service to the practitioner as well, as the text covers, in a concise and lucid manner, brought together by a master hand, a medical man—who alone can best appreciate the needs of the practical physician—the more salient points absolutely required in this department. We have no hesitation in saying that it is the best book of its class for the undergraduate that we know of.

WOOD'S MEDICAL HAND ATLAS OF NERVOUS DISEASES. By Dr. C. Jacobi. Translated and edited by Joseph Collins, M.D. New York: William Wood & Co.

We cannot better give the scope of this atlas of nervous diseases than in the language of the author in the preface. "I have endeavored," he says, "to portray an important chapter of medicine, which usually remains for the majority of students and physicians of all classes foreign and unenjoyable. It has been my idea to make easy of comprehension for students the clinical picture as seen at the bedside and the processes on which it depends, and, at the same time, to make it possible for the practical physician, who has heretofore stood aloof from this subject, to understand the meaning of the most important recently developed facts of neurology. To this end I have made the freest use of illustrations."

These illustrations are of great beauty and accuracy, and can easily be studied in detail by the help of the letter press on the opposite page.

Section I. is devoted to the Morphology of the Nervous System, and is illustrated with ten plates.

Section II. Development and Structure of the Nervous System, illustrated by thirty-seven plates.

Section III. Anatomy and Physiology of the More Important Nerve Tracts, with three plates.

Section IV. General Pathology and Therapeutics of the Diseases of the Nervous System, with fifteen plates.

The admirable manner in which both the plates and text are arranged will make the manual a very acceptable addition to every medical library.

AN ECLECTIC COMPENDIUM OF THE PRACTICE OF MEDICINE. By Lyman Wakins, M.D. Cincinnati: John M. Scudder's Sons, 1895.

The theory of specific medication, so emphatically taught by the Eclectic school, is so apt to be misunderstood that the author states in his preface the interpretation of his school, as adapting the treatment to the symptoms. "We divide," he says, "the force of morbid conditions and meet each separate manifestation with a remedy. As the symptoms vary, the indicated remedies will also be varied; and thus in our philosophy there is no special remedy specific for the cure of any special disease. It is evident that, in order to be specific in the administration of remedies, it is essential that a very close observation of the symptoms of disease should be made, and that specific diagnosis must go hand in hand with specific medication; as our remedies are varied to suit the many different phases presented by morbid states, we must be on the alert to detect these phases and by study learn to apply the particular specific indicated by them." The compendium, in clear and concise language, gives a very excellent and suggestive repertory of the specific remedies indicated in the treatment of disease.

A PICTORIAL ATLAS OF SKIN DISEASES AND SYPHILITIC AFFECTIONS, in photo-lithochromos from models in the museum of the Saint Louis Hospital, Paris, with explanatory wood cuts and text. Edited and annotated by J. J. Pringle, M.B., F.R.C.P. To be published in twelve parts, at $3.00 a part. Sold by subscription. Philadelphia: W. B. Saunders, publisher, 1896.

The new pictorial atlas of skin diseases is issued by the authority and with the aid of the staff of the Saint Louis Hospital, Paris, including Ernest Besnier, A. Fournier, Tinnesir, Hallopean, Du Castel and others, and is a reproduction of celebrated casts in the museum, including those of morbid conditions of the skin, by Baretta, the most complete in detail, and life like, which have ever

been produced. The diagrams, wood cuts and photo-lithochromos are as accurate as science and art can make them, and the letter press descriptions from the hands of the physicians who treated the models, including such men as Besnier and Fournier, add such additional value to the work, as to make it the most complete text-book on the subjects treated yet published. An atlas so complete in all its detail, cannot fail of a large circulation.

COLOR-VISION AND COLOR-BLINDNESS. A practical manual for railroad surgeons. By J. Ellis Jennings, M.D. (Univ. Penn.), formerly Clinical Assistant Royal London Ophthalmic Hospital (Moorfields); Lecturer on Opthalmoscopy and Chief of the Eye Clinic in the Beaumont Hospital Medical College; Ophthalmic and Aural Surgeon to the St. Louis Mullanphy and Methodist Deaconess Hospitals; Consulting Oculist to the Missouri, Kansas and Texas Railway system; Fellow of the British Laryngological and Rhinological Association; Secretary of the St. Louis Medical Society. Illustrated with one colored full-page plate and twenty-one photo-engravings. Crown octavo, 110 pages. Cloth, $1.00 net. Philadelphia: the F. A. Davis Co., publishers, 1914 and 1916 Cherry street.

Within the past few years the attention of pathologists has been specially directed to color blindness, which has been so frequently noticed in engineers, who in their work are guided by the color of signal lights. The author has produced a practical work, which contains all that is essential to a perfect understanding of the subject. In it he discusses the physiological anatomy of the retina, physics of light, theories of color perception and color blindness, methods for detecting color blindness, Pennsylvania Railroad instructions for the examination of employes as to vision, color-blindness and hearing, description of Oliver's series of tests for the detection and determination of subnormal color perception, etc.

TWENTIETH CENTURY PRACTICE. In twenty volumes. Vol. VI., Diseases of the Respiratory Organs. William Wood & Co., 1896.

Owing to unforseen difficulties, it has been found necessary to issue Volume VI. out of its order. Volume V. will be the next volume to appear.

Among the contributors to this volume we notice the names of Professor James, of London, on Diseases of the Nose; E. I. Mourc, M.D., of Bordeaux, on Diseases of the Naso-Pharanx, Pharynx and Tonsils; Diseases of the Ear, by Albert I. Buck, M.D.; Frank H. Bosworth, M.D., on Diseases of the Larynx; Diseases of the Trachea and Bronchial Tubes, by Sir Thomas Granger Stewart and George A. Gibson; Diseases of the Lungs, by Winston Anderson: M.D., San Francisco; Diseases of the Accessory Sinuses of the Nose, by Jonathan Wright, M.D. All of tne authors stand at the head of their specialties, and their subjects are discussed from a thoroughly practical and scientific standpoint, giving the results of late investigations so far as they are substantiated by facts.

THE YEAR BOOK OF TREATMENT FOR 1896. A Critical Review for Practitioners of Medicine and Surgery. 12mo., 484 pp., cloth, $1.50. Philadelphia; Lea Brothers & Co., publishers, 1896.

The summary of the year's advances in all departments of medicine is presented in a clear but concise form, and so classified as to be ready for quick reference. The volume closes with a classified list of the best new books, a section of medical instruments and surgical appliances; pharmaceutical and dietetic novelties and a carefully prepared index.

THE January and February issues of *Littel's Living Age*, notwithstanding the reduction of the price from $8.00 to $6.00 a year, shows no reduction in the amount and quality of the literary feast furnished. The articles are given not in abstract or quotation, but entire, as originally published, and include the very best selections from the periodical literature of the world which could be made.

THE PRINCIPLES OF SURGERY. By N. Senn, M. D., LL.D. Philadelphia: F. A. Davis Publishing Co.

In the second edition of this valuable work the literature of surgery is brought up to the present time, and includes the most useful points of recent investigations. Much new matter has been added, including about fifty illustrations. All of the writings of Dr. Senn are characterized by clearness of expression which impresses the meaning of the author strongly upon the mind.

CORRESPONDENCE.

AN OPEN LETTER.

Dear Doctor: I very earnestly desire to know the comparative frequency of the healthy rectum and of the unhealthy rectum after the operation which is known as the American operation, and also after other operations which remove the mucous membrane in its entire circumference at the anus. I wish to determine as accurately as possible the percentage of failures and the percentage of successes, and can only arrive at such a conclusion by collecting as many reports as possible from medical men. In replying to this letter, will you kindly say, if reporting failures, what is the condition of the rectum at this time, or, if the case is not under your immediate observation, at the time when last seen or heard from by you? If there have been no cases which have come into your own experience and yet of which you know accurately, will you please give the patient's initials and place of residence, that I may thus avoid the danger of twice, or oftener, reporting the same case.

I think it is our duty, without enthusiasm and without bias, to judge of the value of any surgical procedure by the results which attend its employment, and sincerely hope that I may have your thorough co-operation in these efforts. I have the honor to be,

Very sincerely yours,

THOMAS CHARLES MARTIN.

Cleveland, O., Dec. 27, 1895.

THE USE OF BUFFALO LITHIA WATER IN THE CLINIQUE.

To the Editors of the NEW YORK MEDICAL TIMES:

I want to state to your readers some of my experience with Buffalo Lithia Water, covering a period of more than thirty years, since my first visit to those now far-famed springs. Each year of my professional life I have used these waters more and more extensively, finding their virtues applicable to a wider range of diseases.

I am thoroughly convinced of the correctness of the views expressed so well by Dr. Hunter McGuire in the following words, when speaking of the waters of Buffalo Lithia Springs: "I know from constant use of it personally, and in my practice, that the results obtained from its use are far beyond those which would be warranted by the analysis given. I am of the opinion that it either contains some wonderful remedial agent, as yet undiscovered by medical science, as its elements are so delicately combined in Nature's laboratory that they defy the utmost skill of the chemist to solve the secret of their power."

I have often,and repeatedly prescribed the various preparations of lithia and potash, but am thoroughly convinced that the results obtained from the pure Buffalo Lithia Water are far superior.

I have frequently heard Prof. Wm. T. Howard declare, before his class in the University of Maryland, that he had seen more and greater benefit derived from the use of Buffalo Lithia Water, than from any other known mineral water.

Buffalo Lithia Water, Spring No. 1, is unexcelled as an appetizer and promoter of digestion, in all forms of dispeptic trouble affecting the whole, or any part of the alimentary tract.

Physicians and patients all testify to its virtues as a powerful restorative of the broken down or enfeebled system, whether resulting from over work, worry or dis-

ease. It acts directly in producing a better quality of blood, and invigorating and toning up the nervous system generally. Its aphrodisiac properties are very distinctly shown in many cases each year.

As an alkaline diuretic and heart tonic, it has proved most efficacious and certain.

In the various forms of lithæmia it is especially effective and happy in its action.

Hepatic disorders, whether of gouty or malarial origin, and attended with jaundice or biliary calculi, yield to the action of this water like magic.

In many cases of diabetes I have seen most gratifying results from its use.

Diseases peculiar to women, amenorrhœa, menorrhagia, dysmenorrhœa, are each regulated and adjusted in a wonderful degree by these waters. Especially is this the case with young and anæmic girls just merging into womanhood.

Gout, rheumatism, and all uric acid troubles, are markedly relieved by both Nos. 1 and 2 Buffalo Lithia Water. I have now under treatment a most interesting case of "senile or gouty heart," in which my patient is comparatively comfortable, and often able to attend to large business interests, so long as he is fully under the influence of these waters, but to suspend their use for even one day, so intensifies all of his symptoms of failing circulation, as to utterly prostrate him.

As a solvent and eliminator of phosphatic or uric acid gravel these waters have never failed me. I have often placed gravel in the fresh water, and to hasten the disintegrating process, changed the water a few times, when the gravel would first become "honey combed," and then break down into fine sand. It is this action on large stones in the kidney, bladder or gall-bladder that causes the continued outpouring of small particles, so often, for days or weeks, with the ultimate complete relief of all those distressing symptoms from which the poor sufferer has so long complained, and sought relief in vain from "many physicians." Under the influence of Buffalo Lithia Water No. 2, I knew a patient to pass sixty-eight calculi in one day, following an attack of nephritic colic. Another patient (a lady) after a severe attack of hepatic colic passed ten gall stones in one night, at once experiencing entire relief from most distressing symptoms, from which she had suffered for months.

Cystitis and urethritis, simple or gonorrhœal, often yield to the healing influence of these waters at once, when other and standard remedies have failed completely.

Bright's disease, in every stage and form, is benefited by these waters. In many cases large amounts of albumen, epithelium, hyaline and granular casts entirely disappeared from the urine, while in those whose kidneys are too far gone to hope for permanent benefit, all those distressing symptoms are ameliorated in an astonishing degree.

In nephritis following scarlet fever, the action of these waters is equally gratifying. I invariably put my scarlet fever patients on Buffalo Lithia Water as soon as the disease is suspected, and have yet to see any kidney trouble follow where this has been done.

In the nausea and vomiting, ureamic poisoning and albuminuria of pregnancy, I know of nothing to compare with Buffalo Lithia Water. So uniformly gratifying has been my experience with this agent, that it has long been my habit to prescribe it as a prophylactic, as well as most potent remedy through all the stages of gestation.

The water of spring No. 3 is used in connection with that of both Nos. 1 and 2, wherever there are indications of the need of iron, and especially in those anæmic subjects where a laxative effect is also desired.

My object in this letter is to lead my professional colleagues to think of this agent in cases where they have not before used it, with the belief that the experience will accord with my own, which covers so many years.

Fraternally yours, E. C. LAIRD, M.D.

Haw River, N. C., Feb. 7, 1896.

Note.—We heartily concur in what Dr. Laird states from his immense experience, and there is no doubt that these waters should be prescribed more than they are, as they are Nature's restoratives.

The claims of these waters are submitted upon a record of results testified to by most eminent medical authority, which will bear investigation. It is now so many years that these agents have been prescribed by the profession, and their effects are so well-known, that it is only necessary to remind our readers of the increasing field of their usefulness, and that their purity is still maintained. Col. Goode certainly deserves the thanks of the profession for enabling them to possess such wonderful therapeutic means.—EDS.

To the Editors of the NEW YORK MEDICAL TIMES:

To-day I received a number of the MEDICAL TIMES, for which I am thankful. I think I should acknowledge its receipt. I have read it very carefully. I am especially well pleased with it. This number was very entertaining to me, more so than any medical journal I have read for a long time. "Psychology of the Unconscious," by David Allan Gorton, M. D., of Brooklyn, N. Y., fascinated me more than "Trilby." It is the most entertaining article that has fallen under my eyes. I wish I could shake his hand and congratulate him. I like his style, his subject and the way he handled it. I have heard of people falling in love at first sight. I have not seen him, but have fallen in love with him. I wish I had his picture. I would like to read "The Monism of Man." I lectured to a large class of medical students on "Physiology and the Nervous System" for several years. He has shed a flood of light and happiness on these and kindred subjects. Can't you let him know how well he has pleased one reader so far away in the West? I was highly pleased, too, in reading about "The Universal Ether." "Expectoration" is a good and timely article. It is well written up. I can't specify all the good things in this most excellent number. How many have written to you since you sent out many samples that they were pleased? If you ever come west, and come to our city, call on me, and I will drive you around behind a three-minute stepper and show you the sights. Wouldn't you like to see the sun set in golden splendor west of the Missouri river?

Don't suspect too strongly that Indians standing on the Eastern bank of this great river still look with wonder at the King of Day as he passes out of sight behind the hills on the other side.

I used to see them with their crude medicinal agents for curing disease and mitigating pain. Long since they went away, some over into the immortal hunting grounds, some moved farther west.

While they were here I saw them one day tie a rheumatic Indian to a log and press little splinters of wood, greased, around his swollen ankle and knees, and set them on fire. When the fire would reach the skin and blister it, he would cry out aloud with pain. This was one of their ways of curing rheumatism.

What do you think of it? The change is great and magical since then. Beautiful houses in a beautiful city are now here. Fine school houses, churches and hospitals are to be seen.

Well dressed, sensible, courteous and cultured doctors give the sick every advantage they could have in New York.

There are two well-equipped medical colleges here at the present time, and no prejudices. All is as pleasant as a summer's day.

Operations for appendicitis are as common as grapes in the fall season, and doctors relish them much more. This letter seems to suppose that you doctors may not know much of the things so far away. If it is so, it might also suggest that you have some lively correspondent out this way. If you are not interested in reading this letter I know you will forgive me for writing it, because of my intention to do good. Respectfully,

St. Joseph, Mo., Feb. 13, 1896. F. A. SIMMONS.

APROPOS of your recent articles on spitting in public places, you will be interested to learn that for several months, perhaps a year or more, the cars of the Roches-

ter Railway Company (electric street railway) have had posted in two or more prominent places in each car, the following notice:

SPITTING on the floor of this car positively prohibited.

I rarely see the prohibition disregarded, though I have never seen any attempt to call attention to it by the men in charge of the several cars. But Rochester is a pretty civilized, intelligent sort of a place, as cities go.

Yours very truly,

H. K. PHINNEY.

University of Rochester, Rochester, N. Y., Feb. 20, 1896.

SOCIETY REPORTS.

FRENCH MEDICAL SOCIETIES.

ACADEMY OF MEDICINE.

Contagion by Books.—M. Du Cazal: Can books, as is declared, convey the germs of contagious diseases, and what are the diseases that can be transmitted by them? To elucidate these points, MM. Cazal and Calvin have experimented with the streptococcus, pneumococcus, diphtheria, tuberculosis and typhoid fever. Animals were killed by injections of a bouillon in which there were fragments of paper that had been previously soaked in different morbid products, viz., the pus of streptococci, of pneumococci, diphtheritic false membranes, etc. There is real danger in handling, then, books that had remained in the hands of patients affected with contagious diseases, and so it becomes a matter of importance to disinfect such books as thoroughly as possible. To effect this, MM. Cazal and Catrin employed the process of vaporization of formaldehyde, as advised by Lehmann and Miquel, and also the passage through a stove. The latter method is preferable, because it is more simple, and the result more certain.

Pott's Dorso-Lumbar Disease. Triple Abscess by Congestion.—Dr. Jonesco, Bucharest, reported the case of a patient of nineteen years, affected since the age of four with Pott's disease; suffered much pain, with gibbosity, etc. Four months previously two gluteal abscesses made their appearance. On entering the hospital there were three large abscesses freely communicating with each other, one in each thigh, and a third in front of the sacrum, pressing forcibly upon the posterior surface of the rectum. Incision of 15 c.m. for evacuation of the abscess of the right side, and 10 for the left, evacuation of the pus, curettage with Volkmann's curette, suture of wound, Mickuliez's drainage, trepanning of sacrum, cleansing and scraping of the presacral pocket, drainage. Incisions healed by first intention; cure complete on twelfth day; presacral pocket disappeared, and two months later sacral wound healed.

Treatment of Painful Talipes Valgus. Club Foot.—M. Berger, after reading the report of an observation by M. Kirmisson relative to talipes valgus, treated by Ogston's operation, draws from this fact and others similar, the following conclusions: Given the operation of Ogston, it may be asked whether the osseous suture or the extirpation is to be preferred. Without denying that the latter is a more delicate operation to perform than the suture, and that the thread may be broken, as happened to M. Kirmisson, M. Berger prefers the bone to the metallic thread, which he has seen cause painful exostoses. Other operations than those of Ogston have been proposed to remedy inveterate painful valgus; that is to say, in the third degree of what Gosselin calls the tarsalgia of adolescents. Trendelenburg has proposed to practise a supra-bilateral-malleolar osteotomy; but this method produces the formation of an angular callus at the lower extremity of the leg. The results have been, some good, others bad, and this operation is in reality inferior to that of Ogston. Since, after the last operation, the arch of the foot remains anchylosed, Richard Davy and Golding Bird have thought, that instead of cutting away the scaphoid and astragalus, it would suffice to remove the first of these bones. This operation, though as laborious as that of Ogston, gives less favorable results. At the Twenty-second Congress of German Surgeons, Gleich, of Vienna, while not undertaking to combat the valgus element of the affection, but to restore the concavity of the foot, proposed to lower the posterior part of the calcaneum. The results obtained, comprising the elongation of the limb, are not sufficiently advantageous to cause the abandonment of Ogston's method, which continues to be the procedure of preference in the third period of the tarsalgia of adolescents. It continues to be agreed that the first period exclusively justifies the adoption of soothing remedies, such as rest in bed, shoes suitable to re-establish the plantar arch, massage, etc.

Osteomyelitis of the Femur. Necrosis of the Shaft and Part of the Epiphyses. Cure.—M. Diard, Sonne: Case of a man healthy up to 1879, when he contracted a blennorhagia. During the years following, he had incontinence and retention of urine. In 1884 a general infection occurred, showing itself by general symptoms, viz: iritis; numerous abscesses of the right thigh, with necrosis of the femur, and the elimination of small sequestra from diaphysis and epiphyses. The treatment consisted in perfect rest, the injection of the tincture of iodine into the abcesses, and tonic remedies generally. In 1890, nine years after the beginning of the troubles, the bone was reconstructed, and so solidly that the patient could undertake hard labor. Dr. Diard urged the following points. 1. That the blennorhagia was capable alone of explaining the general infection. 2. The persistence of the osteomyelitis during nine years. 3. The cure without operation. 4. The new formation of the femur, permitting walking and working.

ACADEMY OF SCIENCES.

The Origin of the Argon and Helium in the Gases Disengaged from Certain Sulphurous Waters.—MM. Troost and Ouvard investigated the gases dissolved in the water of the Seine and the sea which runs through the soil and that which remains upon the surface, in order to elucidate the question whether the argon and the helium of sulphurous waters proceed exclusively from the atmosphere. They decided that the spectra furnished by the gas from the springs of Cauterets were distinctly different from those of the gas extracted from Seine water and sea water. These last gave the spectrum of argon and scarcely perceptible traces, and often doubtful, of the spectrum of helium, while the gas received from Raillere, or extracts by boiling the water from the same source, gave, very distinctly, the characteristic rays of argon and of helium, and the gas from the springs of Bois showed especially those of helium. The helium contained in the gas disengaged from the mineral waters of Cauteret, proceeds then probably from the rocks in the earth that the mineral waters have traversed. M. Bouchard remarked that if the argon and the helium are inert from a therapeutic point of view, it is not the same perhaps with the mineral substances with which they are in combination. It is the metal, and not the gas, which exercises a physiological action upon the economy.

Mechanism of Muscular Contraction.—M. A. Imbert: Since 1878 M. d'Arsonval, in speaking of the experiments of M. Lippmann, mentioned the phenomena due to the superficial tension of liquids, in order to explain the changes of form and the electric modifications of muscles during their contraction. He has thus been able to refer to the same cause the contraction of protoplasm, and the negative oscillation and the discharge of electric fishes. By the adoption of these views, and by pursuing the deductions arising from them, I have been led, says M. Imbert, to the establishment of the mode by which the functional operations are performed, of the smooth and the striated fibers of muscles and the very characteristic differences due to the construction of the fibers themselves; differences, moreover, which are in direct relation with the dispositions presented by the two forms of fibers,

and the nature of the effects produced by their contraction.

M. d'Arsonval: The consequences of the electro-capillary theory, which I have sustained for nearly twenty years, are numerous. I insist upon the following especially, to wit, that this theory explains why the contraction of the striated fiber is much more rapid and more energetic than that of the smooth fiber. In effect, this difference results from the structure peculiar to these two kinds of muscular fiber. In the striated fiber, the contractile protoplasmic matter is divided infinitely by the striation. The surface of contact, as respects volume, is enormous, and consequently the variations or superficial tension are rapid and multiplied. It is entirely otherwise with the cell constituting the smooth fiber. In this last, the surface, as respects volume, is feeble, and hence the slowness and feebleness of contraction. The division of the protoplasmic matter is an artifice employed by Nature to augment electro capillary effects, and for the same reason we find the same process applied to the construction of the electric organ of fishes.

SURGICAL SOCIETY.

Fever Consecutive Upon Hemorrhages Into Serous Membranes.—Apropos of an observation of M. Peyrot, in which he remarked that in a case in which he removed the spleen that had been perforated by a ball from a revolver, there had been a thermic elevation without septic phenomena, M. Quenu asked if there had been no hemorrhage, to which a reply was given in the negative. MM. Reynier, Pozzi, Quenu and Bazy reported intra-serous hemorrhages (peritoneum, pleura, and synovial) that were followed by thermic elevation, without there being any septic condition whatever of the escaped fluids. Many opinions were advanced to explain the pathogenesis of this curious phenomenon. M. Pozzi thought it was due to a toxic reabsorption of the necrobiosed blood, and M. Quenu ascribed it to a simple reflex action, due to the sensibility of the serous membranes. M. Lucas Championniere said it was one of the forms of traumatic fever that he had before described, but M. Michaux was not at all convinced of the non-specificity of the effusion, and remarked that it was sometimes necessary to leave the culture tubes in a stove for fifteen days before the cultures made their appearance, and, consequently, as far as he was concerned, an elevation of temperature was always an operative indication.

Flapless Amputations.—M. Moty, of Lille, observed at Tonkin amputations of the wrist, made for the purpose of mutilation by the Annamite pirates, in which the stump was well cicatrized without flaps. Without saying that flaps were not necessary, M. Moty thought the fact no less interesting to report; M. Pozzi also observed during the war an analogous fact of an amputation of the arm made at a single blow, that healed perfectly.

Pneumotomy.—M. Tuffier repeated the different objections that had been made to his method of pleural decollation and replied to them. Certainly, the facts upon which he relied, and the cases in which he had applied his method, were not very numerous, and never will be, for they are those in which there are no pleuro-pulmonary adhesions; nevertheless, the good results which both he and M. Quénu have obtained, enable him to affirm that this method may be useful, and he felicitated himself upon having indicated to surgeons this new mode of pulmonary exploration, which offers always the great advantage of avoiding the pneumo-thorax, so dangerous in incisions of the pleura. Dr. Ricard said, as respects deep thoracic suppurations that necessitate pneumotomy, a minute medical examination should be made in the first instance of the diseased locality. Then an aspiratory puncture, and in case of the failure of this method, recourse should be had to an extensive pulmonary incision, after costal resection. All surgeons are agreed upon these points, but the disagreement begins with the subsequent treatment. Dr. Tuffier proposed pleural stripping, and so explore the lung. Is this useful or not? Dr. Ricard believed that it would be better, without losing time, to open the pleural cavity and incise the lung. In a recent case in which he had operated, and despite distinct auscultation signs, by which Dr. Dieulafoy had diagnosed a pulmonary abscess, the parenchyma, upon incision, appeared to be healthy, and at a depth of not more than seven centimetres, and, with the thermo-cautery, he found a purulent collection, by the guidance of his finger introduced into the wound. The patient recovered. Dr. Bazy made numerous cadaveric experiments in order to prove the inutility and impracticability of the operation proposed by Tuffier, for examining the lung through the decollated pleura. The decollation is very difficult, and cannot serve to discover the slightest induration, nor the smallest foreign body in the lung, even when situated at two centimetres from the surface of the parenchyma. The decollated pleura presents itself to the hand as a tense concave membrane, giving no hold to the fingers. The method proposed by Tuffier is not new, but is only a simple process of the same kind as described in the Surgical Congress for examining the lung by introducing the hand into the pleural cavity. The total pneumo-thorax, so much dreaded by Tuffier, is not as dangerous as he believes it to be, and it is useless to invent new operative methods to avoid it. Dr. Quenu was of opinion that in this question of pulmonary intervention facts are yet wanting to enable us to form useful conclusions. No mode of investigation should be neglected, and the method proposed by Tuffier may have its indications and its utility, for the fear of pneumo-thorax is not imaginary. Certainly it is proved that the medical means of observation are not sufficient to exactly localize the lesions, though they may indicate the area for intervention. After making a large costal resection, the lung may be at once explored through the decollated pleura, and if this process yields nothing, recourse can then be had to incision and a subsequent pulmonary examination. As respects pneumo-thorax, M. Quenu insists upon the necessity of observing how the patient breathes. If the respiration is tranquil, pneumo-thorax will be but slightly developed, and the lung will remain in contact with the thoracic wall. But if the respiration should be spasmodic and irregular, then pneumo-thorax will be rapidly developed. Finally the cases in which there are adhesions or not will be different. Dr. Michaux, without stopping to inquire whether it is better to examine the lung directly or through the pleura, thought it more interesting and important to know how the lung could support direct explorations in its interior. Like Ricard, he had had occasion largely to incise the lung with the thermo-cautery, and explore its interior with the finger passed through the incision. The lung bore the explorations very well, and for two months he had the opportunity of examining the cicatrization of a pulmonary wound left without dressing. He recommends then, in order to discover purulent collections undiscoverable by other methods, to incise the lung largely, to pass the finger into the wound, and to plunge the trocar in different directions. Dr. Delome recalled the fact that pneumo-thorax is especially distressing by causing congestion of the heart and of the lung that results from it, and that the best method of overcoming that complication is to arrest the return of the venous blood to the heart by four ligatures put upon the limbs, and practising venesection.

BIOLOGICAL SOCIETY.

Influence of Intellectual Work Upon Respiration and Arterial and Capillary Circulation.—M. Binet: Short, but intense intellectual work—a mathematical calculation, for example—determines notable modifications of respiration and circulation. While the attention is fixed, respiration is less free, more superficial and more rapid. Near the end of the work the arterial circulation indicates an increase in the rapidity of the cardiac contractions, which continues some time after the cessation of the work. At the beginning on the contrary, there is an augmentation of the force of the contractions, and a diminution of the pulsations. In fine, the capillary pulse denotes an increase in the pulsations, characterized upon the chart by extensive oscillations at the beginning of the work, while towards the end the rapidity of the pulsations diminishes, and the height of the oscillations becomes depressed in consequence of the capillary vaso-constriction.

MM. Gley and Charrin exhibited two rabbits, whose

parents were inoculated with pyocyanic cultures. They were first inoculated and afterward injected with toxines. Two of the surviving young presented malformations of the ears and osseous deformities. This fact is important, in view of the heredity of malformations. M. Charrin remarked that these malformations resembled those of syphilis, which tended to prove that the specific character of the hereditary lesions of syphilis had without doubt been exaggerated.

M. Nomrecourt investigated at the maternity the influence of disease in the mother upon the nutrition of the child, and proved that the antecedent existence of toxines in the blood of the mother lessened very much the appetite of the child.

M. Arthur showed crystals of oxyhemoglobine, visible to the naked eye, and obtained by precipitating very slowly by alcohol the aqueous solution of oxyhemoglobine.

M. Mossè observed a case of acromegalia in which there co-existed a voluminous tumor of the pituitary body, hypertrophy of the thyroid and of the thymus. Injections of thyroid liquor produced a marked amelioration. M. Mossè insisted upon the fact of the simultaneous lesion of three closed glands.

M. Marinesco presented a patient affected with diabetes, and who had ptosis of the left eyelid, complete paralysis of the ocular-motor communis, and left hemiparesis. This is a type of the affection known as the syndroma of Weber, and due to a lesion of the "protuberantia annularis."

How Changed are the Times!—The discovery of the migration of the taenia has given to science a fruitful idea. At last one can see that the knowledge of worms is of utility to the hygienist. The future must charge itself soon with demonstrating this truth in the most forcible manner. In every country discoveries multiply. A series of diseases, hitherto unknown, have made their appearance upon the medical scene.

Others, of whose cause we are ignorant, are ascribed to worms. Ankylostoma, discovered at Milan in 1840, is no more a mere curiosity. Observe how its role has enlarged, and of what pathogenic importance it has become. It is that which causes the chlorosis of Egypt, the anæmia of miners, and which, during the tunnelling of Saint-Gothard, killed thousands of workmen. In India, Lewis found worms in the blood, a curious discovery paralleled by analogous verminous observations in France by Delafond, in the blood of the dog. The same are found in Brazil, and, more than this, grown worms are discovered in the lymphatic vessels of the arm, of which the others are the embryos. In China, an English physician, Manson, discovered the singular fact that the mosquito, on stinging a man, swallowed the embryos, and that these last are at once evolved into the condition of larvæ in the body of the insect, afterwards fall into water at the same time with the latter and from thence penetrate by occasion the digestive tube of man. We will cite a few examples —the whole list would be too long. A professor of the veterinary school of Pisa, Rivolta, found in the liver of the rabbit an organic parasite that lodged in the biliary canals. A celebrated German naturalist, Leuckhart, recognized that this organism represented a new zoologic type, which he designated by the name of "coccidie." Another zoologist, as well-known, Balbiani, of the College of France, made a masterly study of this parasite. He elucidated its structure, its processes of reproduction and dissemination, and so by one stroke medicine is enriched by a capital discovery. Since these memorable works, the coccidies and the psorospermose have held their places in clinical medicine and pathological anatomy. The certain observation of Gubler at the "Hopital Beaujon," in 1858, would undoubtedly have remained unexplained if Balbiani had not detected the coccidie in the liver of the rabbit. Researches of this nature, accomplished in the silence of the laboratory, have more influence upon the general progress of medicine than all the theories, however seductive, that do not rest upon scientific knowledge or absolute and precise experimentation. Helminthology, or rather parasitology, to empioy a more comprehensive expression, has already begun to enlighten medicine; the results obtained even now are as various as they are unexpected. It is not difficult to foresee that there are yet important discoveries in reserve, a number of which bear an immediate relation to medicine, inasmuch as each one of them affords valuable knowledge of prophylaxis and hygiene. Studies of this kind require special knowledge, which the physician does not possess at all. He should have profound instruction in natural history; it is necessary to know not only the parasites of the human kind, but to be a professional zoologist. All this does not come to him spontaneously, but must be the result of long and legitimate study.

M. Morau studied heredity in white mice that were attacked with a peculiar and inoculable form of epithelial tumor, and found that one-half of the progeny of these animals did not reach full term, and that among the rest there were numerous and evident traces of rachitism and various malformations. M. Charrin presented a communication from MM. Cadéac and Bournay upon the passage of micro-organisms through the digestive tube of the ox. Owing to the anatomical structure, it is easy to understand that the intestinal canal of the bovides retains the bacilli of Koch, which are harmless, but on feeding a bull on hay mixed with dessicated tubercular portions of pulmonary structure, they found virulent Koch's bacilli in the fæcal matter. M. Garnault explained the operative procedure in removing the stapes and completely separating it from the hypertrophied mucous membrane of the middle ear. About one-half of the cases of deafness may be cured or ameliorated by this method. M. Roger successfully inoculated the gallinaceæ with the tuberculosis of the mammiferæ in the proportion of one-tenth of the subjects experimented upon. M. Kalt made a communication upon the diffusion of microbes in the ulcerated cornea. The gonococcus facilitates the passage of the staphylococcus and the two microbes are found associated.

M. Ranvier made an important communication upon the structure of the lymphatic glands. He discovered in the mesentery of the pig, that the vessels surrounding the gland, form on contact, veritable cavernous bodies. As respects the glands themselves, their follicles are situated in a reticulated tissue which is not separated from them. There is no perifollicular capsule, and an injection of soluble Prussian blue, thrown indifferently into the gland, at once penetrated the follicles and the surrounding reticulated tissue. M. Chauveau presented a case of idiocy in a child of six years, suddenly becoming cachectic, with bloated face and other symptoms of myxœdema. Treatment with the thyroid body of the sheep, produced a rapid disappearance of all the symptoms of the myxœdema, without any amelioration of the idiocy.

M. Artaud communicated a number of observations of tuberculosis of animals, respecting the influences of this disease upon their offspring. He observed sterility and malformation among the descendants so frequently as to establish the hereditary acquisition of these characteristics.

M. Marinesco presented an example of polyneuritis in which there existed a certain number of lesions of the cells of the anterior cornua of the medulla, due to the propagation to the medulla of peripheric neurites. M. Dejerine reported an observation of primitive sclerosis of the lateral cords of the medulla, manifesting itself during life by a spasmodic paralysis of the four limbs. Autopsy showed the existence of a symmetrical sclerosis limited to the lateral columns, and presenting its maximum of intensity in the dorsal region.

ARGENTINE MEDICAL SOCIETY.

Treatment of Fractures by Massage.—Translated from the *Semana Medica*. M. Degoud: For more than six months, all the cases of fracture coming to my surgical service have been treated, from the first day, by massage, and I am able to declare the results good and satisfactory. The treatment was applied to fractures of both upper and lower limbs. It is well-known that fractures of the humerus are very painful, and that they produce a large number of pseudarthroses. Thanks to massage, the pain notably diminishes, or is completely stopped. The imm

bility of a special apparatus is not necessary, and pseudarthroses are exceptional. In the case of a soldier of the "Corps des Invalides," he fell from his horse and fractured the arm at the point of union of the superior third with the middle third of the humerus. At the point of fracture, movable fragments of the humerus could easily be felt, and the pain was very great. Massage was begun the day after the accident by Dr. Guillermo Wagner, and pain ceased at once. A simple bandage was applied to support the arm during the interval between the applications of massage, this being sufficient in cases of fracture of the middle and lower thirds. In this case, as in those of Lucas Championniere, there was rapid consolidation. Massage is never painful when skillfully applied; it always simplifies the treatment of fractures, and I consider it superior to all others.

A New Process of Nephropexia.—Dr. Brian, of Lyons, experimented upon a dog with a new method of nephropexia without suturing the kidney or irritating the capsule, after the method of Tuffier. His experiments have demonstrated to him that the capsule of the kidney, when exposed, and covered with a simple antiseptic dressing, will proliferate, and adhesions between it and the parietes will soon be formed. It would be interesting to see this method applied to man, for it is certain that however harmless the threads of catgut, when applied to the renal parenchyma, may be, it would be very much better to do without them altogether.

Treatment of "Flatfoot," "Piedplat."—According to Dr. A. Hoffa, Prof. of Surgery in the Medical Faculty of Wurtzbourg, flatfoot is caused particularly by a defect in the resistance of the metatarsal bones, due to a softened condition, a species of rachitism of these bones, and also to a weakness of the muscles that unite to give to the plantar arch its solidity; viz., the muscles of the calf of the leg.

The treatment of this anomalous condition should have reference to the consolidation of the bones, and the strengthening of the muscles in question. To meet the first indication our *confrere* prescribes the remedies habitually used in the treatment of rachitism, such as cod liver oil, phosphorated, and arsenic in the form of pills. To give strength to the muscles he has recourse to energetic massage of the sole of the foot and the leg, and recommends a series of gymnastic exercises, comprehending the following alternate movements of flexion and extension of the toes while in the erect position. The feet being parallel to each other, lifting the body upon the points of the feet, elevation and depression of the heels in the erect position, placing the feet so that the toes touch each other, with the heels as far apart as possible. While the feet are in this last position, the patient should execute the following movements: Lift the heels, bend the knees, extend the knees, depress the heels and so repeat. To strengthen the supinator muscles, make movements of adduction and abduction of the foot, with the exercises of standing and walking, keeping the internal side of the foot elevated as much as possible. The patient should also accustom himself to more active walking, taking care not to allow the foot to rest upon the whole plantar surface, but to apply it to the ground, first on the heel, then on the rest of the foot, keeping the feet parallel. Finally, a shoe should be worn with a metallic sole on its interior surface, made of bronzed aluminum, and moulded or fitted to the plantar surface, reaching from the heel to the extremities of the toes, and so arranged as to form an inclined plane, and at the same time support the internal side of the foot. When the flatness of the foot is not excessive, and there exists no immobility of it in a deformed position, requiring forcible reduction, M. Hoffer obtains very excellent results by the means above described. The pains disappear, the patient is able to walk easily, and the plantar arch is more or less perfectly reconstructed.

Suffering of the Fœtus During Parturition.—Dr. Demelin, Chief of Obstetrical Clinique of the Faculty of Paris thus concludes an article published by the *Journal des Praticiens*, in which he investigates the proofs of the suffering of the fœtus during parturition. He asks: "What is to be done when the fœtus suffers?" Nothing is more simple, at least theoretically. It is necessary to terminate delivery as soon as possible.

If dilatation is complete, there is nothing to hinder; it must be the forceps or version, according to circumstances. But if the cervix is imperfectly dilated, it will be necessary, before extracting the fœtus, to practise a preliminary operation, which is the artificial dilatation of the orifice. For this the balloon of Champetier de Ribes may be employed, or the separator of Tarnier, and when the orifice is sufficiently large, deliver the child. An important point is to proceed during the extraction promptly, but without violence or reckless precipitation, for if the fœtus resists asphaxia well, it is still sensitive to injury. Life may be restored more easily and surely after slow and gentle manipulation than when the interference is rude and violent.

Diagnosis of Uterine Diseases From the Nature and Quality of the Discharges.—According to Mish, the different vaginal discharges, the time they appear and their odor and quality, enable a precise diagnosis to be made. He distinguishes the following varieties, the characters of which he considers pathognomonic. (1) Profuse leucorrhœa, odor specially fetid, granula, irritating to the genitals, appearing during menses, and in the intervals, accompanied by profuse hemorrhages, cancer of the cervix. (2) Leucorrhœa with hemorrhage, containing matter similar to the sebaceous matter of the vulva, sarcoma of the uterus. (3) Watery discharges, similar to the menstrual, without odor or very slight, persistent, accompanied by profuse hemorrhages, filroma; slight hemorrhages, polypus. (4) Abundant sanguineous discharges, coincident with the menopause, and during the interval of the menses, fibroma. (5) very abundant loss of blood, occurring suddenly after the menopause, cancer. (6) Slight leucorrhœa, offensive but not fetid, with hemorrhage, cancer of the body of the womb. The very great importance of an early and precise diagnosis, in order to give to the patients the appropriate care so urgent in their cases, and to institute from the beginning of the diseases, induces M. Mish to think that it would be useful as well as interesting to physicians to appreciate the value of the primitive symptoms of these various diseases.

Treatment of Granular Ophthalmia With the Sulphate of Copper and Massage.—Dr. Prokopenko is very successful in the treatment of the above disease, by associating the old and familiar remedy, the sulphate of copper, with a preliminary massage, the object of which is to give activity to the circulation and to nutrition. The massage is practiced by means of a glass rod with a round end, which is applied vigorously to the internal surface of the lids, and the portion of the cornea that is affected by the disease. This done, a solution of copper is freely applied, not only to the granulations, but to the whole palpebral mucous membrane. For five years that our Russian confrere has employed this method, he has almost, without exception, obtained cures in which there were neither cicatrices nor retractions, and within the space of a few weeks.

Female Surgeons and the Royal College of Surgeons of London.—There is in London a special college of medicine for women, and they are beginning to occupy prominent consideration as female physicians. Many are at the head of the medical hospital services, and also the surgical and obstetric, and, stimulated by their success, those who are surgeons are striving to secure the title of Member of the Royal College of Surgeons, but they have not as yet succeeded, and their admission remains, for the present, forbidden. The *British Medical Journal* has recently published a long and earnest plea in their favor. The author of the article first considers the arguments that have been presented to the Society against their admission. Women, it is said, may obtain the diploma of the University of London, and consequently have the right to practise medicine. Let that suffice. They have no aptitude for scientific work, and have produced nothing in this direction, and it may be especially argued that if they become members of a scientific body, they might be able to reach even the presidency, and eminent London surgeons might behold with terror the possibility of their scientific sessions being directed

by a petticoat. But all these reasons avail nothing, according to the *Journal*. In the first place, the incapacity of women is far from being demonstrated by facts; the contrary is indeed the case. In effect, during the last year, the school of medicine for women received, in proportion to the number of its pupils, the majority of diplomas from the London University, and by the report of M. Clement Lucas himself, one of its eminent professors, the female examinations were not inferior to those of the male candidates. The hospital services directed by women were very efficiently conducted. Madame Scharlieb, of the New Hospital for Women, made thirty-six laparotomies with only two failures, at the Battersea Maternity Charity. Seven thousand deliveries and all the necessary obstetrical operations, were practiced by women, and only nine deaths occurred all explicable, and not due to any fault of the operation. Where then, we ask, is their incapacity, and as to the reproach of their never having yet produced any work of scientific importance, can that be reckoned as a crime? 'Tis true that women have not furnished the amount of work that has been done by men; their minds are turned more in the direction of practical than theoretical work. One may be a great lawyer and a good physician without having published anything, and they should rather be felicitated on not having contributed to the increase of the number of the compilations and repetitions that are annually published. It seems, then, that the royal colleges cannot much longer interdict an entrance to them to women; the feeble majority which prevented them on the last occasion demonstrates that fact. Moreover, are they not their colleagues in the British Medical Corporation, of which they already form a part, and to which they were unanimously admitted?"

Treatment of Infantile Diarrhœa.—The most important anti-diarrhœic remedies are opium, astringents, intestinal antiseptics and inert powders. Opium is extremely active in children, hence its action must be watched. Dr. Simon, who has a predilection for this therapeutic agent, advises that as many drops of the laudanum of Sydenham should be given in twenty-four hours as the child counts years, viz., half a drop for six months, a drop for a year, etc. It is indicated in apyretic, non-infectious diarrhœa, and particularly in lientery and chronic diarrhœa, tubercular for example. It diminishes the gastro-intestinal secretions, and produces a paresis of the intestinal muscular layers. Astringents, especially tannin and the vegetable, should be administered in mild forms of diarrhœa, or in the graver forms, as adjuvants of other means, tannin, 10 to 30 centigrams, extract of ratanh, 50 c. g. to 3 grammes, cachou 4 to 20 grammes of the tincture, colombo, guarana, etc., constitute, with the perchloride of iron, which should never be associated with tannin, the principal astringents; the nitrate of silver, by injection, 50 c. g. to 100 grammes of water that has been boiled, for lesions of the large intestine. Inert powders play a large part in the therapeutics of infantile diarrhœa; their employment is convenient, exempt from danger, and very efficacious. Bismuth, in the form of the subnitrate and the salicylate, occupies the first rank; it acts as an antacid and absorbent, destroys the excessive acidity of the gastric and intestinal secretions; absorbs the gas, which enters largely into the production of diarrhœa. The sulphuretted hydrogen transforms it into the sulphuret of bismuth, producing black discoloration of the stools. The principal successors to bismuth are lime and its salts, lime water 10 to 60 grammes; phosphates, acid or tribasic, are especially employed. Among the intestinal antiseptics, lactic acid should occupy the first place, and, according to Hayem, is particularly efficacious in the green diarrhœa of children. It seems to render the intestinal contents inimical to the development of the bacillus of this diarrhœa. In infectious diarrhœas, accompanied with fever, calomel acts as a purgative and an antiseptic; it evacuates the intestines, and opposes the development of microbes. The most important of the other antiseptics are betol, salol, benzonaphtol, of which 50 c. g. may be given to a child of one year. Naphthaline is recommended by Bougers in the dose of 25 c. g. daily. Associated with washing out of the rectum, the same for the stomach, with boiled water, borated water, vichy, salt water, has given very remarkable results to Prof. Grancher. By this method the digestive tube is mechanically cleansed of the foreign substances and toxic elements it contains. When the diarrhœa is only a symptom, more or less important, of a generally infected or dyscrasic condition, it is evident that the efforts of the physician should tend, above all, to combat this condition, by the use of the sulphate of quinine for malaria, mercurials and iodide of potash for hereditary syphilis, etc. Finally, in the diarrhœas of children, as of adults, there should be considered an uremic diarrhœa, due to the elimination of toxic substances in the organism, as a result of renal insufficiency. M. R. Drews, of Edinburgh, has employed tannigen in infantile diarrhœas; he obtains from it excellent results, and considers it as having an astringent, antiputrid and antibacterial action, and another important fact, it does not disturb the functions of the stomach. He gives it in the dose of 0 gr. 30 to 0 gr. 05, according to the age, repeated three or four times daily. M. de Buck, of Gaud, also makes a therapeutic study of tannigen in the *Belgigue Medicale*. This body is the diacetylic derivative of tannion. Its formula is $(C_{14}\ H_8\ (C\,H_3\ C\,O_2)\ O_8)$, and it was first discovered and employed by H. Meyer, of Marbourg. It produces no gastric irritation, saponifies in the intestine, is absorbed and eliminated in the urine in the form of gallic acid, is a very active astringent and promotes constipation. It has neither odor nor taste, and hence is easily administered in milk, acts on all diarrhœas except those of nervous origin, and M. Buck concludes that it is a promptly curative remedy in acute inflammatory conditions of the intestine. The dose administered by Meyer, Moller and Kunkler varies from 0 gr. 10 to 1 gr., three or four times daily. Salophene or the salicylate of acetylparamido phenol or acetylparamido salol, is a salicylic ether of acetylparamido phenol. M. Huot has made a complete study of this new remedy, and considers it a remarkable substitute for the salicylate of soda; is not irritating to the stomach, nor occasions nervous troubles, and has the same antirheumatic action. He advises its use in chorea, and cites two cases of cure; also useful in neuralgia and migraine. Dose, 3 to 4 grs. in twenty-four hours. Being insipid, is easily administered in tablets; it passes through the stomach without decomposition, and is changed in the intestines into salicylic acid and acetylparamidol.

M. Stoos recommends bromoform and antispasmine in whooping-cough. The former diminishes the frequency of the attacks, but does not appear to shorten the duration of the malady. The antispasmine, which is a mixed compound of salicylate of soda and narceine, is more easily sustained by young children than bromoform, and gives the same results. M. Schmitz prescribes napthaline for the oxyuris vermicularis which so frequently distresses children, causing intestinal and serious nervous troubles. He gives, for two days, four or five doses of 0 gr. 15 to 0 gr. 40 of naphthaline between the taking of food. This may be repeated after an interval of from eight to fourteen days. M. Liscia has experimented at the Hospital of Livourne upon the action of the sulfoichthyolate of ammonium in suppuration. With this body he dresses scrofulous ulcers, phlegmons, incised adeno-phlegmons, varicose ulcers and different forms of abscesses, and gives it the preference over iodoform, of which it has not the repulsive odor, and its employment is also absolutely harmless. J. A. C.

TRANSLATIONS, GLEANINGS, Etc.

RETROSPECTIVE THERAPEUTICS.

By Alfred K. Hills, M.D., Fellow of the Academy of Medicine, New York.

Acetanilid in the Treatment of Chancroids.—Dr. Thomas K. Morton is reported as saying in the *Philadelphia Polyclinc* that upon "chancroids the effect of acetanilid is most surprising." He states that all soft venereal sores (chancroids) and inflammations "have uniformly

healed in from one to seven days, with a single exception," which one was of a phagedenic nature, and required cauterization with nitric acid before it would heal under the acetanilid." He prescribes a drachm of powdered acetanilid. The patient is to wash several times daily, and then rub in the dry powder. If the sore is beneath the prepuce, leave a quantity of the drug inside, which prevents excoriations by urethral discharges. The drug is entirely devoid of odor.

Elevation of the Pelvis as a Cure for Nocturnal Enuresis.—Stumpf, in the *Munch. Med. Woch.* for June 11, 1895, gives an account of a simple and apparently rational expedient which he has successfully adopted in the treatment of nocturnal enuresis, especially in older children (*Bost. M. & S. Jour.*). His theory is that during sleep the spinchter of the bladder is apt to become relaxed, so that as the child lies horizontally in the bed a little urine passes the sphincter and enters the deep urethra. The irritation of this urine causes at once strong reflex action of the detrusor, and the bladder is at once emptied in a full, strong stream. On order to prevent this occurrence during sleep a simple expedient is adopted, namely, the elevation of the pelvis, so that an accumulation of urine of ordinary amount in the bladder will gravitate back and distend the fundus, and not press against and tend to pass the sphincter. The elevation is secured by allowing the child only a single, small, flat pillow under the head, and placing one or two ordinary pillows under the thighs, so that they lie at an angle of 130 to 150 degrees with the horizontal spine. This method was entirely successful in fourteen cases, some of them inveterate. It was usually necessary to continue the treatment for three weeks, after which time the children were able to return to their former sleeping position without relapsing.

Management of Typhoid Fever.—The *Philadelphia Polyclinic* replies as follows to some inquiries by a correspondent, with regard to Dr. John E. Woodbridge's method of aborting enteric fevers, which was described in our columns some months ago:

"In so far as the treatment referred to makes use of the well known principles of cleanliness and antisepsis, it is safe, though it is not the best method of applying this principle. In so far as it ignors the lessons of experience, concerning rest, concerning the management of the bowel, concerning temperature, concerning hygiene in general, it is dangerous, and in cases of true typhoid fever will sometimes prove deadly. The larger proportion of patients subjected to it have hitherto escaped because they have not had typhoid fever; another large proportion because the tendency of typhoid fever is to recovery even despite errors in treatment. In general, *the simpler the treatment in typhoid fever the better; the less number of drugs given, the better; the less quantity of whatever single drug will answer the purpose that is taken, the better; the more closely Nature is followed, and the more cautiously rash interference is shunned, the better.* Judged by all the canons of science and of art, the treatment concerning which our correspondent inquires, is treatment to be avoided by the careful physician."

And—judged by the rules we have emphasized above—may not the *ideal* treatment (or the nearest possible approach to it) be that of an intelligent, non-bigoted use of symptomatology?

Argonin in the Treatment of Gonorrhœa.—In the *Centralblatt f. Chirurgie* for December 21st there is an abstract of an article on the use of argonin argentum-casein in the treatment of gonorrhœa, by Dr. J. Jadassohn, published in the *Archiv f. Dermatologie und Syphilis*, XXXII., 1, 2. What we must strive to accomplish, says the writer, is to kill the pathogenic germs as early as possible, without doing unnecessary damage to the mucous membrane. Hitherto the most trustworthy agents for this purpose have been weak solutions of silver nitrate (1 to from 3,000 to 4,000), ichthyol and argentamine. The writer has employed argonin in a great number of cases of gonorrhœa, both in men and in women, since Meyer's investigations showed that it was less irritating than silver nitrate and argentamine, and that in strong solutions it killed the gonococci promptly, and he has been led to the following conclusions: 1. Both experimental and clinical investigations have shown that argonin kills the gonococci in a short time, notwithstanding its lack of albumin-coagulating power. Thus far it has been mostly used in solutions of from 1½ to 2 per cent. 2. Even in stronger solutions it has hardly any tendency to set up inflammation and no caustic properties, so that it is particularly suitable for use in the treatment of acute gonorrhœa in men, whether affecting the penile or the deep urethra, and of gonorrhœas of either the urethra or the uterus in women. 3. It seems destitute of astringent properties, and on that account purely anti-catarrhal treatment should accompany its use.

Treatment of Ether Collapse.—Schilling (*Munich Med. Woch.*, Sept. 17, 1895) reports that in the treatment of collapse from ether, hypodermic injections of camphor are very effective. The author advises the employment of larger doses than recommended in text-books. As much as one grain of camphor may be employed. Half-grain doses are quite effective, but the results following the injection of one grain are astonishing and gratifying.

The solution of camphor should be one part of camphor to ten parts of olive oil. Large doses of camphor are well borne, and produce no ill effects. The camphor is eliminated within two hours, and hence has no cumulative effect.

RETROSPECTIVE DIETETICS.

Oriental Medicinal Food.—Dr. Wm. E. S. Fales, ex-Acting United States Consul, Amoy, China, contributes some interesting and instructive observations on this subject to the *Dietetic and Hygienic Gazette*, May, 1895. The Far East, he says, has practically no knowledge of chemistry, physiology and other kindred sciences; nevertheless, it has long had an extensive practical knowledge of the treatment of disease by medicinal and medicated foods, and of the action of a vast array of substances upon the different vital functions. The Chinese are especially expert in this direction. So far as can be learned the knowledge has been acquired by slow experience, and has not been derived from more intellectual or more scientific communities. There are references to the topic, there are instructions upon the treatment of various maladies through the assimilative process, as far back as 1000 B. C., a time when Europe and even Italy and Greece were sunk in the densest barbarism. It is interesting to compare the empirical system of China with the scientific theory and practice of our own race. The result shows that the Oriental, working patiently and laboriously along the lines of induction, has arrived at nearly the same results as the Occidental through general science and deduction.

Thus from time immemorial Chinese physicians have recommended the use of the pepsin bearing portions of the pig's stomach in the preparation of food for people troubled with ordinary indigestion or dyspepsia. They have gone even further, and have shown that they understand in a rude way the nature of the operation they advise. Their formula is that the meat and the tripe shall be cut with a sharp knife as thin as possible, so as to expose the largest amount of water surface of animal tissue to the chemical and mechanical action of the cooking, that the heat shall be moderate, and the digestion in the pot as long and protracted as possible. One old writer recommends digesting or cooking meat in this manner for three or four days, remarking that at the end of that time the meat will have become converted into a rich and benevolent soup, in which will be found floating spongy masses of solid matter, which should be carefully strained out before the fluid is given to the patient. He also recommends the addition of a little lime juice, or lemon juice, and better still, of some aromatic vinegar, to facilitate the cooking of the food, and also the improvement of the patient's stomach. This is just about as accurate a description of the manufacture of a peptone as could be given by an intelligent human being without any scientific knowledge of chemistry or of physiology. This knowledge of what we are pleased to call artificial digestion runs largely through all Chinese cooking.

I have often, out of curiosity, examined the numerous made dishes of the Mongolian cuisine, with a view to ascertaining their constitution. Whether it was soups or stews, ragouts or fricassees, pot roasts or boiled, I have found tripe finely shredded or thinly sliced in three dishes out of five. The ratio was largest in houses of wealth, where well-paid cooks were the rule, and smallest in those where the conditions were otherwise. As they discovered the peptic virtue of tripe in all food animals, they likewise found the same quality in the gizzard of the bird kingdom. They have employed the gizzard even more liberally in their cooking than they have the tripe, and regard it, as is the scientific truth, as the most valuable of all animal tissues. This offers a curious contrast with our own experience, because it is only within the last twenty-five years that modern chemistry has found the gizzard to contain the digestive principle known as ingluvin, which is as strong a digestive ferment as pepsin, but which contains or possesses a much more comprehensive action. Even up to to-day we have but few preparations in the market which contain ingluvin, and no preparation which contains ingluvinated tissues or proteids.

In the employment of the gizzard in cooking, the Chinese chef treats it in much the same way as he does tripe. He uses it in the dish direct, and not in the sauce. In the case of illness he makes a very palatable and exceedingly nutritious compound, by digesting over a slow fire for many hours the feet of chickens and ducks, the flesh and the sliced gizzards. The ingluvin does not act exactly as pepsin does. It softens the flesh and aids the warm water in converting the digital cartilages into gelatin. This preparation is about the best I have ever seen. When skillfully made it is yellowish brown in color, and so thick and gelatinous as to turn to jelly when allowed to grow cold. Unlike a jelly, however, which is always more or less insipid, it has the full flavor of the chicken or duck, and also a large amount of the meat in a pasty and easily assimilated condition. In cases of weakness or exhaustion it is a great restorative. When administered to children is is usually diluted.

The malting principle or diastase is similarly utilized by the Oriental. He applies it to rice and millet flour until these are converted into sugar, and then boils down the solution until it becomes the famous Canton syrup. This is used all over the East as both a medicine and a food or sauce. It is almost white, and has a curious semi-empyreumatic flavor that is very pleasant, and prevents the cloying sensation of a purely saccharine fluid. The same operation is applied to other flours with similar results. Chestnut flour, when half digested, is extremely palatable. Potato flour is almost indistinguishable from the glucose and grape sugar made in the United States. Sweet potato flour has a warmish and suggestive rather than aromatic flavor. Bean and pea flours have a flat and rather insipid taste, but are said to be of value in nervous disorders.

The star of all these products is obtained from almond flour, whether half malted or converted into syrup. The familiar peach-kernel flavor remains, and makes it exceedingly agreeable in whatever form it is used.

On one occasion I watched a Chinese physician making a tea or broth for a person troubled with a severe laryngitis. The ingredients which he employed comprised poppy leaves, crushed almonds, bean sprouts, ginseng, dried peach pits, dried pumpkin seeds and Canton syrup. It was cooked over a slow fire for about four hours. I do not know if ginseng contains any curative principle, but the other ingredients would be an improvement upon many well-known pectoral cough syrups.

The Chinese are much wiser than ourselves in regard to flour. Strictly speaking, we make but two—wheat and buckwheat. Maize, oats and barley, we convert into meal but not into flour, and there we stop. The Chinese millers make flours out of wheat, oats, rye, barley, buckwheat, millet, potato, sweet potato, chestnuts peanuts, beans, peas, lentils, pulse, rice, almonds and fifty other vegetable substances. This offers a variety unknown to our own civilization, which often enables the physician to nourish a patient who does not care for food. It also enables him to give different qualities to teas, broths and stews. Thus, for example, the flour from pumpkin seeds, melon seeds and watermelon seeds makes a rich mucilage, which besides containing pectin and colloid starch, also contains 10 per cent. of albuminoids. The flour from almonds, peach pits and cherry pits, contains a hydrocyaniferous essentialoil which has a very pleasant flavor and savor, and acts medicinally as a nervine and antispasmodic.

A form of beef, iron and wine is made by mincing meat into a paste, letting this digest cold in strong wine in closed bottles for thirty days and then filtering off the fluid. This preparation contains many of the albuminoids which are precipitated when any heat is employed in making the ordinary preparations, and approaches Valentine's extract.

Ginger is another favorite remedy of the Chinese physician, and a favorite ingredient of the Chinese cook. It is used in more forms than with us. All of them are admirable, and could be profitably adopted by our own people. The pickled ginger undergoes a great change in its preparation. It becomes a dark crimson or maroon in color. It loses its bite, but retains its flavor unimpaired. It can be eaten by a small child without any danger or even unpleasant consequences. The preserved pickled ginger is made by stewing the pickled ginger in honey or in syrup, and is very delicious. Even in these two mild forms it is a good stomachic and carminative. In cases of light indigestion, as well as where there is loss of appetite or weak digestion, half an ounce of ginger is used in flavoring the broth or stew for the patient. The root is removed from the dish just before it is served, the oil, essential oil, and flavor being all that is deemed advisable by the medical faculty. It is also employed as a corrective ingredient with stewed fruits and vegetables of an aperient character. Its use is so general that it is in the stock of the smallest store in every part of the great empire.

Another class of foods which are very common in the Far East are the chutneys. They are familiar to us from one variety, which comes to our market in the form of a rich and highly-flavored fruit preserve. This, however, is merely one example of one class, and does not give any idea of the subject as a whole. The general notion of a chutney is an accessory or side dish of fruits and vegetables, spices, and lime or lemon juice. There can be any amount of variation as far as fruits, vegetables or spices are concerned, but the acid element must be always present. The favorite combinations in making chutney are with the mango, the mangosteen, the peach, pear, tamarind, cherry and apricot. Any two or three of these stewed together until the pectin they contain begins to become jelly, and then mixed with lime juice and sweetened to suit the taste, make a good chutney. It is extremely pleasant in itself; it is pleasanter as a sauce to meats, and it makes a good dessert when served with rice, bread or biscuit. It is aperient, anti-scorbutic and antifebrile in character. It is not greatly used in the northern parts of China, but is found everywhere in the South, in both China and India.

Our practice in employing fine charcoal for sour stomachs finds its counterpart in the East, where they toast cold boiled rice until the surface is charred. It is just as efficient as our method and much more palatable. Our use of menthol has its parallel in the Orient, where the oil of peppermint is applied externally for headache, coryza, neuralgia and rheumatism, or as an antiseptic for wounds, abrasions or burns, internally for gastric and intestinal disorders, and as an ingredient in teas and broths for serious colds, coughs and kindred ailments.

If space permitted it would be easy to add a hundred other illustrations of the essential similarity of the practices of the East and the West, but the few given will suffice to show that the long centuries have taught them in a blind way much that we have recently learned from the discoveries of our most advanced sciences.

A member of the Malaprop family gave an excuse for changing her medical practice, on the ground that the Homœopaths are good for infant-ry, and the regulars are best for adult-ry, and her trouble was in the latter direction.

MISCELLANY.

—The proposed memorial to the late Sir Andrew Clark has failed.

—The death rate in Denver, Col., the past year was 11.15 per 1,000.

—As arms are longer than tongues, so our deeds should exceed our speech.

—Gelsemium controls pain in the ovaries better than anything else except narcotics.

—There are people who never accomplish anything because they undertake too much.

—There is only one real failure in life possible; and that is not to be true to the best one knows.

—A sudden decline in temperature during typhoid fever is a warning of hemorrhage from the bowels.

—Sir Henry Thompson has received a legacy of $500,000 from a grateful patient. The heirs are contesting the will.

– The census taken last April by the Board of Health, shows that New York City has 10,942 more women than men.

—The State Legislature has authorized the Post Graduate School and Hospital of this city to receive the sum of $30,000 annually.

—By a decision of the Supreme Court of Michigan, the Homœopathic College of the State University will be moved to Detroit.

—Two football deaths are reported in the daily papers, George Butterworth, of Rochdale, Scotland, and Samuel Steelfox, of Shamokin, Pa.

—Stockholm has the largest death roll from alcoholism of any city in the world. Ninety in 1,000 die from the excessive use of intoxicants.

—Union College, at its recent centennial commencement, conferred the degree of LL.D. on Surgeon-General Tryon, United States Navy.

—The medical department of the navy consists of 175 when its ranks are filled. There are at this time fourteen vacancies, a d few applications.

The report of the Paris Health Department shows a decrease of 65 per cent. in the death rate of diphtheria since the introduction of antitoxine.

—The Japanese surgeons during the war employed as a a dressing for wounds the ash of rice, the carbonate of potash in the ash making it antiseptic.

—Tancereaux says that the cough occurring so often in hepatic persons, with tickling sensation in the throat, is calmed by quinine in one or two grain doses.

—Sir Joseph Lister has been elected President of the British Association for the Advancement of Science, which is to hold its next meeting in Liverpool.

—A competitive examination for the position of assistant surgeon in the United States Marine Hospital Service was held at Washington on the 10th of February.

—The *South African Press* advertises that there is a good opening for a sober, steady and handsome bachelor doctor in one of the Transvaal towns. Send photo.

—It is said perforations of the intestine can be detected if timpanitis be present by the respirating and cardiac sounds becoming audible on pressing the abdomen.

—UNFINISHED. Willie has a critical eye, and finding the new born baby without teeth or hair, insisted that baby was unfinished, and that another doctor should be employed.

—A bill has been introduced into the United States Senate to regulate the practice of medicine in the District of Columbia. A board for examination and license is provided for.

—The little human waifs picked up in the streets of the city will hereafter be sent to Bellevue Hospital. Under the old system of taking them to the police station 80 per cent. die of exposure.

—In the administrative County of London, during 1893, coroner's jury returned a verdict of death from starvation, or death accelerated by starvation, in fifty-one cases, of which sixteen were females.

—A surgeon lately practicing in Bristol, England, was called to the door by a ring, but instead of the expected patient found a collector for overdue rent. This so discouraged him that he killed himself.

—Prof. Wortoff, of Moscow, who held the chair of bacteriology at that university, has died of blood poisoning caused by a wound in the neck, inflicted upon him by the explosion of a flask containing a bacterial culture.

—There have recently been three successful cases of excision of the spleen for injury, at St. Thomas's Hospital, London. These, we are told by the *Lancet*, are the first successful cases that have occurred in Great Britain.

—A young woman living in Paris recently gave birth to a child, whose eyes were placed on the top of its head. The infant seems to be doing well, and crowds of people have tried to satisfy their curiosity by visiting the house.

—It is stated in the *Hospital* that the medical society of Berne is endeavoring to prevent the publication of notices of cases of suicide. It has been observed that suicides have frequently been suggested by these means.

—The death is announced of Dr. Hoppe-Seyler, the well-known chemical teacher and investigator, of the University of Strasburg. He published, in 1881, an exhaustive treatise on physiological chemistry, and later a practical handbook on the same subject.

—A recent London *Lancet* has interesting allusions to the successful use of electricity in trigeminal neuralgia and to long-continued treatment of tic douloureux, which is practically the same thing, with long and short applications of the current. Success is uniform in all cases.

—The fourteen-year old daughter of John Wilson, Augusta, Ky., has been crying all her life. When she plays or sleeps or goes visiting always the cry is in evidence, sounding as if it came from one in great grief, but it is a purely mechanical matter, and the child insists she does not know she does it.

—Dr. Canini, of Leghorn, a well-known Italian specialist in diseases of children, who died recently, has bequeathed his entire estate, amounting to 2,300,000 lire ($460,000) for the foundation of a hospital in which poor children suffering from diphtheria may have the advantages of the serum treatment gratuitously.

—Prof. Hajak, of Vienna, is reported to have declared that smokers are less liable to diphtheria and other throat diseases than non-smokers, in the ratio of one to twenty-eight. It also appears that smoking is always positively forbidden in bacteriological laboratories, because it is known to hinder the development of the bacteria.

—Dr. William Hunter Baillie died recently in England at the age of ninety-eight years. Dr. Baillie came of a long line of medical ancestors. He was the only son of Matthew Baillie, M.D., who attended George III. He was the grandson of Thomas Denman, M.D. John and William Hunter were his uncles, and Sir Benjamin Brodie his first cousin once removed.

—A news item from East Moriches, L. I., reports that Selden Reeve, eighty-six years old, who has been demented for several years and very deaf, evaded the watchfulness of his daughter's family this morning and jumped from the second-story window. A physician, who set a broken leg and wrist, says that the old man has fully recovered his mental faculties and his deafness has completely gone. His mind, his daughter says, seems now quite clear.